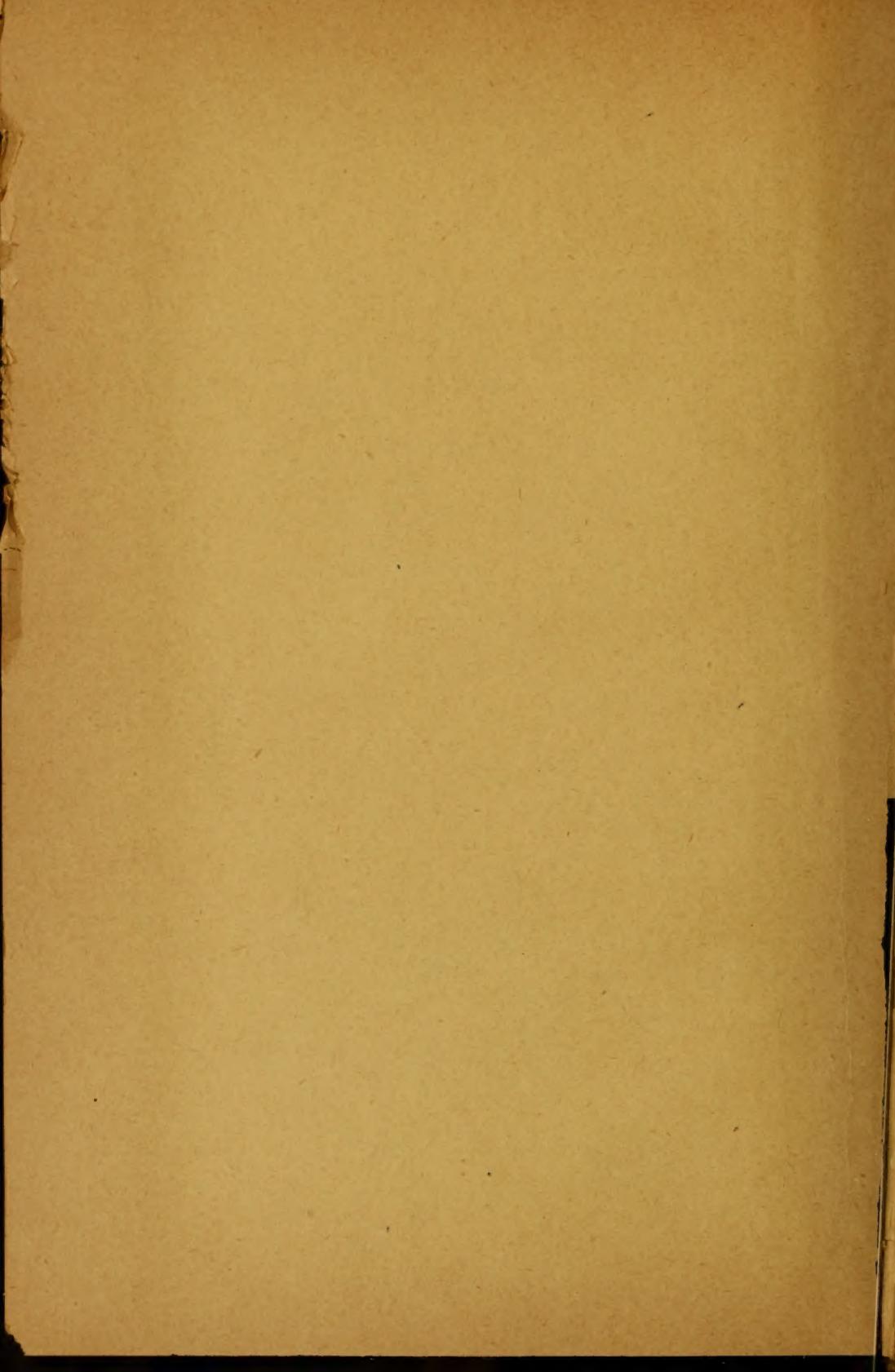
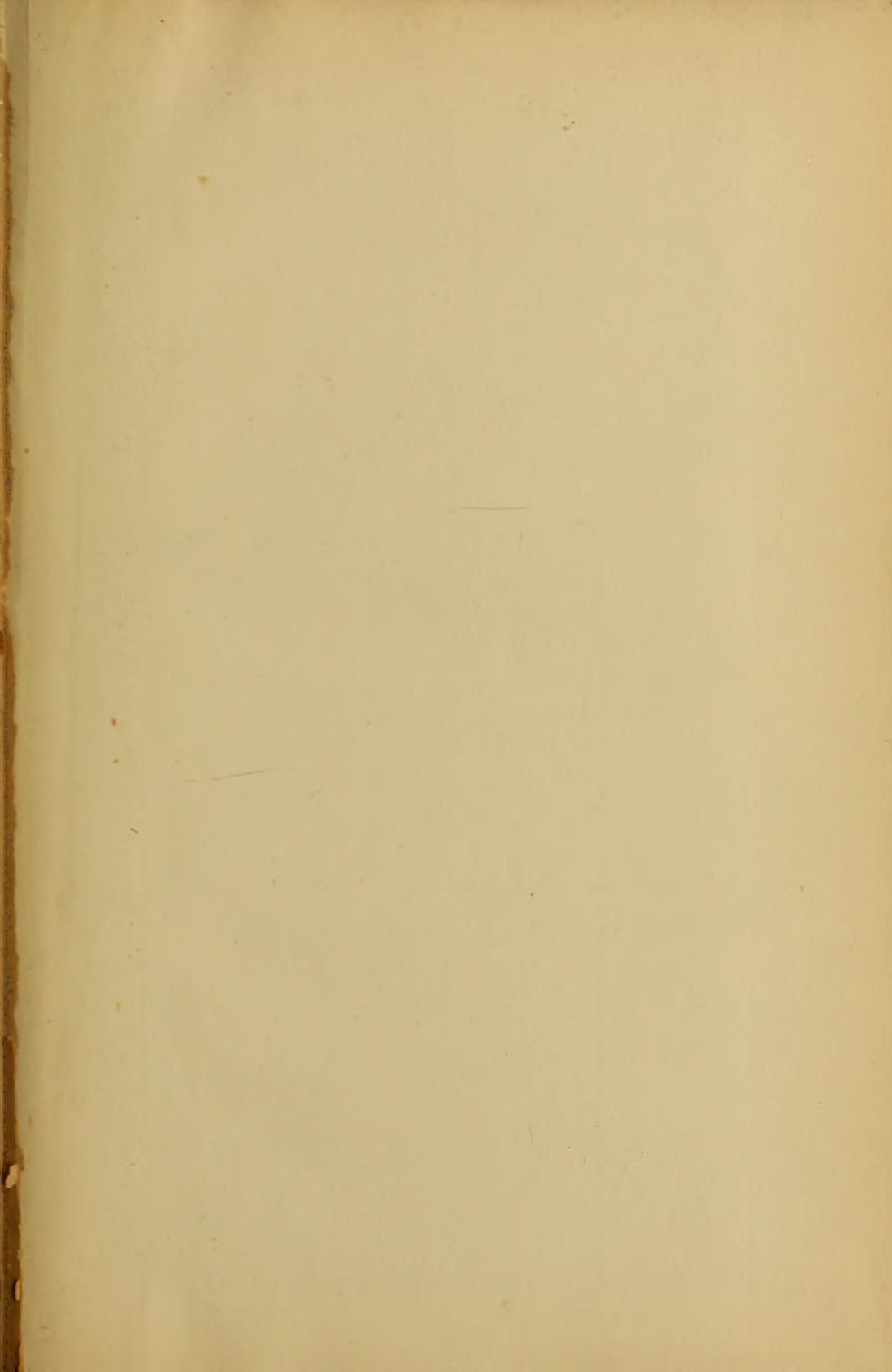
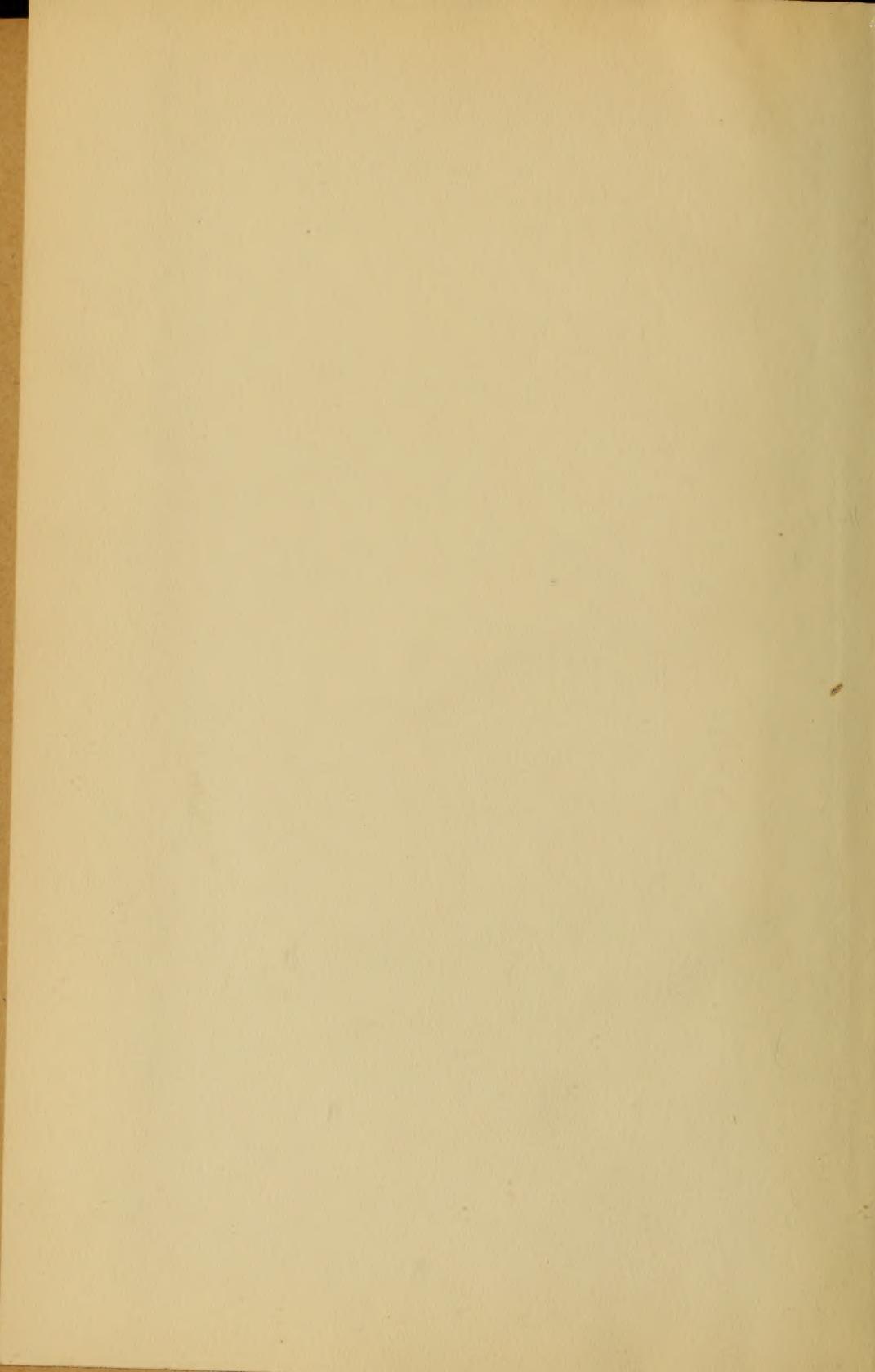


FOR THE PEOPLE
FOR EDUCATION
FOR SCIENCE

LIBRARY
OF
THE AMERICAN MUSEUM
OF
NATURAL HISTORY







THE PUBLIC SCHOOLS AND THE
AMERICAN MUSEUM OF NATURAL HISTORY

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History and Present Status of Museum Instruction
and the Proposed Extension to the Schools
of Greater New York in the Years

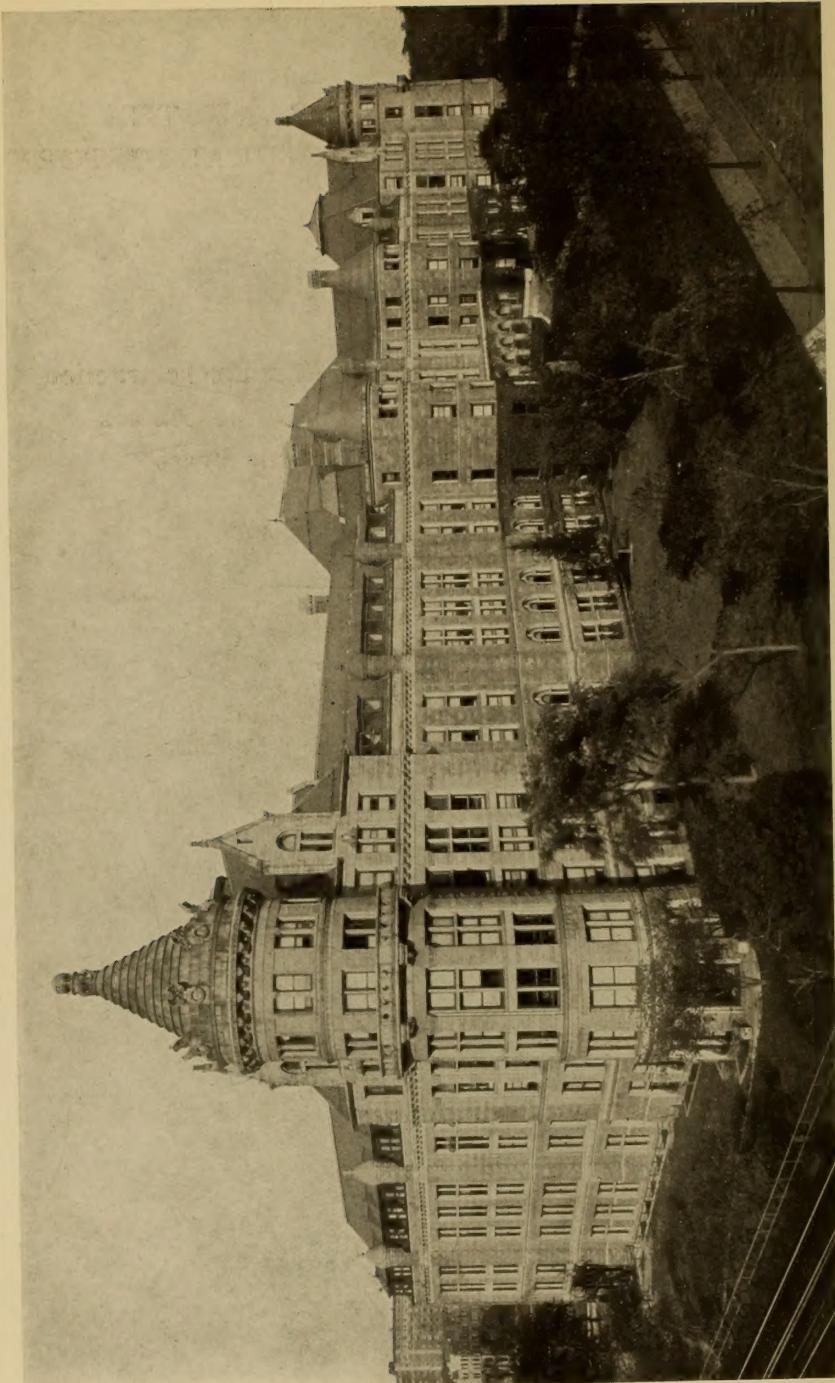
1914 and 1915

PREPARED BY
GEORGE H. SHERWOOD
Curator, Department of Public Education

MISCELLANEOUS PUBLICATIONS OF
THE AMERICAN MUSEUM OF NATURAL HISTORY, No. 5

NEW YORK
June 23, 1914

YEARBOOK
1910
AMERICAN MUSEUM
OF NATURAL HISTORY



AMERICAN MUSEUM OF NATURAL HISTORY
77th Street and Central Park West, New York City

THE PUBLIC SCHOOLS AND THE
AMERICAN MUSEUM OF NATURAL HISTORY

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COMMITTEES ON EDUCATIONAL EXTENSION WORK
OF THE
AMERICAN MUSEUM OF NATURAL HISTORY

For the Board of Education:

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Frank D. Wilsey
Ira S. Wile
Francis P. Cunnion } *Special Committee*

For the American Museum of Natural History:

President Henry Fairfield Osborn

Felix M. Warburg
R. Fulton Cutting } *Trustee Members*

George H. Sherwood
C.-E. A. Winslow } *Faculty Members*

THE MUSEUM'S RELATIONS TO THE PUBLIC EDUCATIONAL SYSTEM

"The rise of the museum as a new force in town, city, state and nation *IS THE LATEST PHASE OF EDUCATIONAL EVOLUTION*. The school, the college, the university and the library have gone in advance; the museum follows and is winning its own place and influence because it supplies a demand which none of its sister institutions fills.

The very fact of this independent development is a proof that the museum is not one of the luxuries of our metropolis, but an essential and vital force in the enlightenment of our people. Every community, small or large, needs its museum as it needs its schools and its churches.

The old museum idea was that of a sanctuary or refuge, a safe deposit vault for curious, rare or beautiful objects which might be lost or destroyed; the child or the ignorant visitor was tolerated rather than attracted, the curator was a keeper, not a teacher.

The new spirit within the natural history museum is the educational spirit, and this is animated by what may be called its ethical sense, its sense of public duty, its realization that the general intelligence and welfare of the people are the prime reasons for its existence, that exploration, research, exhibition and publication should all contribute to this, that to serve a community the museum must reach out to all parts of nature and must master what nature has to show and to teach. *The museum will flourish if the high educational service of the state is inscribed over its portal and instilled in the mind of every member of the staff from the highest to the lowest.*

The growing museum influence, which during the past quarter century has been especially remarkable in certain cities of Germany and Austria, throughout Great Britain and above all in the United States, is largely due to what may be

called the new museum idea, namely, that *the museum is not a conservative but a progressive educational force, that it has a teaching quality or value peculiar to itself, that the museum succeeds if it teaches, fails partially if it merely amuses or interests people and fails entirely if it simply mystifies.*"

HENRY FAIRFIELD OSBORN

President

American Museum of Natural History

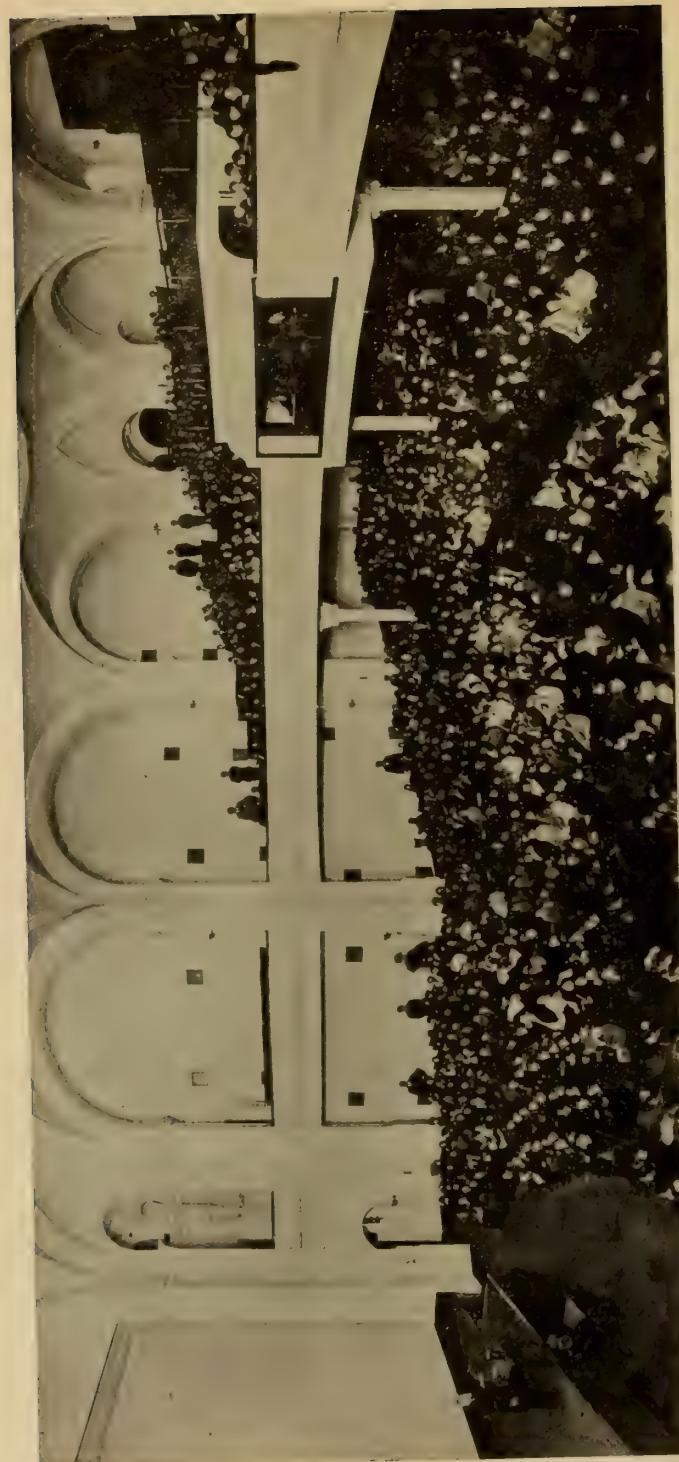
**HISTORY OF THE RELATIONS OF THE
AMERICAN MUSEUM OF NATURAL HISTORY
TO THE PUBLIC SCHOOLS**

I. FIRST PERIOD: 1869-1903

**LECTURE COURSES FOR TEACHERS — FIRST TEACHING
COLLECTIONS DEPOSITED IN THE SCHOOLS**

The possibility of the Museum as a factor in public education was one of the motives which inspired that group of public-spirited men who organized and founded The American Museum of Natural History. The general educational value of its collections and exhibits was widely accepted, but as the institution grew it became more and more evident that if the Museum was to fulfil its function it must establish closer relations with the public schools and the educational system. The desirability of museum extension was early recognized and the first steps in accomplishing this were taken in 1880, when the Trustees authorized Professor Albert S. Bickmore, the Superintendent of the Museum, to prepare for the public school teachers a special course of lectures on natural history subjects

Lectures for Teachers to be given at the Museum and to be illustrated with the Museum's collections. In coöperation with the Board of Education, arrangements were made whereby thirty teachers were detailed to attend these lectures. The first lecture was given in 1881 to an audience of twenty-eight persons. The first course consisted of eighteen sessions and, although the lectures were given out of school hours and the attendance was purely voluntary, there was a gratifying increase in attendance throughout the course. This work received the hearty indorsement of the City Superintendent of Schools and of the President of the Normal College of the City of New York, and was continued in succeeding years. By 1884, the educational authorities of the City and State were so impressed with the value of this educational work that the State appropriated the sum of \$18,000 for its



PROFESSOR ALBERT S. BICKMORE ADDRESSING TEACHERS IN THE AUDITORIUM OF THE MUSEUM

further extension. Under this grant, Professor Bickmore prepared a comprehensive series of lectures to be given to the teachers of the City and State. Twenty lectures were scheduled for each year. The main purpose of these lectures by Professor Bickmore was to give the teachers exact information and to acquaint them with the riches of the Museum in order that their teaching might be more effective.

At this time, the Museum also prepared a teaching collection of rocks of Manhattan Island, dried plants and many specimens of corals, shells, crustaceans and insects. This material was installed in a suitable cabinet and deposited in each of the 160 public schools, so that the teachers would have on hand material to illustrate for their pupils the facts that they had learned at Professor Bickmore's lectures. From this beginning, there developed the system of Visual Instruction so closely identified with Professor Bickmore's name. The work received the support of the State from 1884 to 1903, except for a period of three months in 1890. During this period of twenty years the work was under the immediate direction of Professor Bickmore and in the carrying out of these educational plans he brought together that unique series of stereopticon slides which he recently presented to the Museum and which forms the nucleus of the Museum's now extensive series. In 1904 continued ill health compelled Professor Bickmore to retire from active service.



THE CHILDREN BEHOLD A "CITY" OF STRANGE BIRDS

II. SECOND PERIOD: 1904-1914

INTRODUCTION OF CIRCULATING NATURE STUDY COLLECTIONS — INAUGURATION OF LECTURES FOR PUPILS — ESTABLISHMENT OF SPECIAL GUIDE SERVICE — SPECIAL PROVISION FOR THE BLIND

The need for further extension of the Museum's educational work became imperative when in 1902 nature study was introduced as a subject in the curriculum and an elaborate Syllabus

Circulating Nature Study Collections was placed in the hands of the teachers. This Syllabus required the teacher to give instruction in a great many subjects but made no provision for supplying the necessary material. The individual teacher was supposed to get her material when and where she could. In their urgent need many teachers appealed to the Museum for assistance. The Director of the Museum realized that here was an opportunity for the Museum to greatly extend its sphere of usefulness and, following his recommendation, the Trustees authorized the preparation of a series of collections for use in the schools. These collections were prepared with the object in view of placing in the hands of the teachers, so far as practicable, the actual specimens referred to in the Syllabus of Nature Study issued by the Board of Education. In many respects they were quite similar to the collections deposited in the schools in 1884 but the new collections were sent out as *loans* and not as *permanent deposits* as was done with the first collections. This feature alone has an important bearing on the success of the present system of circulating collections. Each collection is put up in a small cabinet about the size of a suit case and is accompanied by a leaflet giving simple facts on the structure, habits and characteristics of the particular species in the collection. These notes are necessarily brief and are intended chiefly as suggestions to the teachers. A brief bibliography of the best books on the subjects is noted and attention is called to the local collections of birds or other animals in the Museum building.

The method by which the teacher obtains the collections has been made as simple as possible. The Museum furnishes

blanks upon which the principals make application for the collections and at the same time indicate the sequence desired. Delivery is then made by the Museum messengers, who call again at the end of the loan period, that is, in three or four weeks, and make the second delivery. This method keeps the Museum in frequent touch with the teachers and enables us to understand their needs better.

The work began with ten small cabinets of birds. The requests for the collections became so numerous that it was necessary immediately to increase the number as well as the variety of the collections. In the first year collections of minerals and rocks, native woods, insects and several other lower animals were added to the series. The collections then covered the greater part of the material suggested in the Syllabus and the growth of the work merely required the duplication of the collections already in circulation. Recently, however, owing to the growing interest in questions of public health, a number of folios pertaining to public health have been added to the series. These comprise photographs and charts illustrating the sources, spread and prevention of contagious diseases, the part played by insects in carrying disease, and bacteria and their work. These public health



A CIRCULATING
NATURE STUDY COLLECTION

EXTENSION WORK

THE AMERICAN MUSEUM OF NATURAL HISTORY

NEW YORK CITY

PUBLIC SCHOOLS SUPPLIED BY THE MUSEUM
WITH NATURE STUDY COLLECTIONS IN 1913

NEW YORK BOTANICAL GARDEN

NEW YORK ZOOLOGICAL PARK
(NEW YORK ZOOLOGICAL SOCIETY)

AMERICAN GEOGRAPHICAL SOCIETY
HISPANIC SOCIETY OF AMERICA

COLLEGE OF THE
CITY OF NEW YORK

AMERICAN MUSEUM OF
NATURAL HISTORY

NEW YORK HISTORICAL SOCIETY

NORMAL COLLEGE OF THE
CITY OF NEW YORK
(Brooklyn Institute of
Arts and Sciences)

COLLEGE OF THE
CITY OF NEW YORK

NEW YORK PUBLIC LIBRARY

METROPOLITAN MUSEUM OF ART

COOPER UNION

NEW YORK AQUARIUM
(New York Zoological Society)

CHILDREN'S MUSEUM
CENTRAL MUSEUM
AND
BROOKLYN BOTANIC GARDEN
(Brooklyn Institute of
Arts and Sciences)

NEW YORK HISTORICAL SOCIETY

NORMAL COLLEGE OF THE
CITY OF NEW YORK

NEW YORK PUBLIC LIBRARY

AMERICAN MUSEUM OF
NATURAL HISTORY

NEW YORK HISTORICAL SOCIETY

NORMAL COLLEGE OF THE
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NATURAL HISTORY

NEW YORK HISTORICAL SOCIETY

NORMAL COLLEGE OF THE
CITY OF NEW YORK

NEW YORK PUBLIC LIBRARY



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folios were prepared under the immediate direction of Professor C.-E. A. Winslow, Curator of the Museum's Department of Public Health. They are in great demand, especially by the teachers of High Schools, and their further duplication must soon be undertaken. The collections now comprise minerals, rocks, woods, sponges, corals, sea-urchins, starfishes, mollusks, worms, crabs, insects, birds and small mammals, as well as the public health folios. The following statistical table illustrates the growth of this branch of the work:

Growth of the Circulating Nature Study Collections

	1904	1905	1906	1907	1908	1909
Number of Collections in use	120	400	435	450	484	435
Number of Schools of Greater New York supplied	115	200	300	325	383	419
Number of Pupils studying the Collections	20,000	375,000	800,000	725,000	575,801	922,512

	1910	1911	1912	1913	
Number of Collections in use	390	512	537	597	
Number of Schools of Greater New York supplied	334	486	491	501	
Number of Pupils studying the Collections	839,089	1,253,435	1,275,890	1,378,599	

At the present time there are 597 of these study collections available for use, and, in addition to the regular series, from time to time special collections have been prepared to meet the needs of some special occasion.

A complete list of the circulating nature study collections will be found in Appendix I.

Through personal acquaintance with the teachers, brought about by the establishment of the circulating nature study collections, we learned that there was a widespread desire for illustrated lectures for children, which would supplement the class-room work in geography, history and natural science.

Lectures for Pupils The question of special lectures for school children was brought to a focus when in February, 1904, the Committee on Children's Interests of the New York City Teachers' Association (through its Chairman, Miss Alida S. Williams) requested the Museum to give a series of lectures for children illustrative of the studies pursued in the public schools, and offered to submit for approval a plan of lectures adapted to and suitable for the various grades of the school course of study. This request was acted upon favorably by the Museum authorities and in coöperation with the Committee on Children's Interests a course of twelve lectures was prepared and delivered in the fall of 1904. Each of these lectures was given three times in the course. The lectures were in the nature of informal talks and were fully illustrated with lantern slides. The subjects were chosen with special reference to the course of study, particularly in history, geography and nature study, and were designed to supplement the class-room work of the teachers. The lectures were given by members of the Scientific Staff on Monday, Wednesday and Friday afternoons at four o'clock, and attendance on the part of teachers and pupils was wholly voluntary. Their success was instant. The children literally came to the Museum by thousands and the teachers were enthusiastic in their praise of the work. Similar courses have been given, each spring and fall, with two exceptions, since that date. The subjects have been varied from time to time, and in recent years the children's interest has been intensified by the introduction of motion pictures. A complete list of the lectures given in the Spring Course of 1914 will be found in Appendix III.

The interest in natural history aroused in the teachers and pupils by the circulating nature study collections and the lecture courses, combined with the increased transportation facilities, have led many teachers to bring their pupils to the Museum for study and examination of the principal exhibits. In order to

enable the teachers and the pupils to utilize the time spent at the Museum to the best advantage, the plan was adopted in 1906 of providing an instructor for such classes. This instruction was adapted especially to children. This branch of the work has

Special Guide Service had a steady growth and the plan of giving special lectures to pupils, illustrating the facts brought out in the lectures by later examination of the collections in the exhibition halls, has developed from it. In some instances teachers have preferred to give their pupils special talks or lectures themselves. For this purpose, the Museum has provided several small class rooms, equipped with



TEACHER AND CLASS AT THE MUSEUM

chairs, tables, blackboards and stereopticon, which have been reserved on request. Not infrequently specimens from the study collections also have been placed in the class room for special study. The Museum possesses more than 30,000 lantern slides, of which about 12,000 are colored, and the field parties which the Museum is sending to remote parts of the earth bring back photographic material which enables us from time to time to make additions to the series. The views illustrate plant life, animal life, industries, customs of people and physical geography. Up to the present time, it has not been practicable to lend these slides for use outside the building, but for several years teachers have been permitted to select slides to illustrate a desired lecture which was later given in the Museum's class rooms.

The broad scope of the educational work of the Museum is indicated by the action of the Trustees in making special provision for instruction to the blind. This work was begun in 1909 and has been in the immediate charge of Mrs. Agnes Laidlaw Vaughan of the Museum's staff. During the first year *Provision for the Blind* the work for the blind was experimental and more or less spasmodic. In 1910, however, its development and extension were made possible through the bequest of Phebe Anna Thorne, and gifts from her estate by her executors, Jonathan and Samuel Thorne. This generous endowment, known as the Jonathan Thorne Memorial Fund, provides a fixed income, which enables the Museum to send loan collections to schools in the vicinity of New York, to give illustrated lectures in the Museum to school children and to the adult blind, and to supply transportation for the blind and their guides to and from the Museum.

This year the plans for thorough organization have matured. A census of all the blind in and near New York City has been prepared with the assistance of the New York Association for the Blind and the New Jersey State Commission. A letter was sent to each person on this list, enclosing a card to be filled out and returned. The data relate to the occupation and hours of work, whether the person is able to attend afternoon or evening lectures, topics of especial interest and ability to secure guidance. This file enables us to communicate directly with the blind people, and to get an idea of the topics that will be useful to them.

Two evening lectures were given, the first by Rear Admiral Peary on December 18. The audience passed from his lecture to an examination of relief charts, of the sledge that reached the North Pole, of fur clothing, Eskimo implements and arctic animals, including the Peary caribou, the most northern of the deer family. The second talk was given on February 20 by Mr. Louis Agassiz Fuertes, on *Our Birds and Their Music*. A collection of the birds mentioned in the lecture was arranged for examination by the visitors.

The objects lent to the schools for the blind include the regular school collections and ethnographical specimens selected according to the request of the teachers. Indian or Eskimo



BLIND CHILDREN AT THE MUSEUM

clothing, implements and toys arouse such interest that several of the children have written letters to the Museum during the school year to express their pleasure in the collections. The material is selected, outside of its interest value, with regard to form, use and durability under use, although the care exercised by the teachers is effective in keeping the objects intact. Suggestions for related reading often accompany the loans.

For the blind children, the visits to the Museum are recognized as part of their school work and are made during school hours. There are more than one hundred blind children in the elementary schools, too many to deal with satisfactorily at one time. One half of the classes came to the Museum on the second Tuesday and the other half on the fourth Tuesday of the month during October, November and December, 1913, and February and March, 1914. The same lecture was repeated, and was also given to classes from Newark.

In addition to natural history specimens and ethnographical material lent to the schools, we have prepared several small models of large mammals.

The visit to the Museum means more than an hour's instruction, more than the mere viewing of new objects; it means a change of environment, a stimulation of intellectual expression, the appreciation of the socializing forces which go to produce public institutions for the distribution of knowledge and the betterment of life.



III. STATUS OF MUSEUM EXTENSION IN 1914

The circulating nature study collections have been so long in use that the teachers have come to regard them as permanent adjuncts to their work. Throughout the present school year we have continued to circulate these collections. At present there are 597 available and there are more than 400 schools on our distribution list. As has been the custom in the past ten

Circulation of Nature Study Collections years, the collections are delivered to the schools by our messengers and called for at the end of the loan periods without expense to the teachers or the Board of Education. No changes of

note have been made in the regular collections but we have prepared a number of special collections to meet special demands; for instance, the drawing teachers have found that many of the natural history specimens furnish excellent subjects for their pupils in drawing, as for instance the color patterns and markings of various insects and shells, and additional collections designed for this specific purpose are in preparation. It frequently happens that the High Schools need a more comprehensive collection than is contained in our regular circulating collections when their students are taking up certain biological problems. So far as practicable, we have met the desires for such collections by sending to the schools special material.

The regular fall and spring courses of lectures for pupils have been given as usual. The topics of these lectures have been confined to geographical, historical and industrial subjects, as past experience has taught us that such lectures best supplement

Lectures the class-room work. These were attended by 18,212 pupils. Considering that these lectures are delivered after school hours and that attendance of both teachers and pupils is wholly voluntary, the large numbers that have been present are very gratifying. The teachers who have had the energy to bring their pupils to these lectures deserve the highest praise for their devotion.

Desiring to encourage in the children a greater interest in nature and outdoor life, we tried the experiment this spring of giving a series of lectures on natural history. There were four

lectures in this course dealing with local animals and plants. The subjects were as follows:

The Sea Creatures of our Shores

The Birds of our Parks

Fur-bearers found within Fifty Miles of New York City

Wild Flowers of the Vicinity of New York City

These lectures were delivered in the auditorium on Thursday afternoons at four o'clock. The average attendance was 440, and the lectures were so well received that we are planning to continue them in the fall. In addition to these two courses of regular lectures, the members of the Staff of the Department have been called upon to give a number of special lectures to classes ranging from thirty to two hundred in number. Several of the teachers have also utilized the Museum's slides and class rooms in giving lectures of their own to their pupils.

The plans for special instruction for the blind occupy a prominent place in our annual educational program. During the present year this work has been extended by the introduction of lectures by prominent people. Probably no audience at the Museum ever had greater enjoyment than did the 300 blind

Education for the Blind who assembled last autumn to hear Rear Admiral

Peary tell his story of the discovery of the Pole.

The pleasure of these guests of the Museum was further increased by the special exhibit of polar animals and the sledge actually used by Peary in his memorable trip, placed in Memorial Hall.

The members of our staff have kept in touch with the teachers of the blind in the public schools, and frequently these pupils have been brought to the Museum for informal talks by the instructors. This work has been correlated with the regular work in the schools. Specimens are placed in the class rooms and the blind children are permitted to handle them. During the year twelve globes two feet in diameter have been added to the models of animals and other material designed for use in the schools where the blind are taught. On these globes the land masses are elevated and represented by a rough surface and the water by a smooth surface. The globes have been completed only recently and will be ready for circulation in the autumn.

FREE PUBLIC EDUCATIONAL INSTITUTIONS

OF THE

CITY OF NEW YORK

IN THE YEAR 1911

(SECOND EDITION)

Public Schools' College of the City of New York American Museum of Natural History Metropolitan Museum of Art New York Zoological Park Staten Island Institute of Arts and Sciences

Public Libraries New York Botanical Garden Brooklyn Institute of Arts and Sciences

New York Aquarium Under Corporate Control

Hispanic Society of America American Geographical Society

Cooper Union Staten Island Institute of Arts and Sciences

New York Historical Society American Geographical Society

Under Corporate Control

Normal College of the City of New York New York Zoological Park Staten Island Institute of Arts and Sciences

American Museum of Natural History Metropolitan Museum of Art Brooklyn Institute of Arts and Sciences

New York Botanical Garden Staten Island Institute of Arts and Sciences

Under Corporate Control

Hispanic Society of America American Geographical Society

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LEGEND

- Public Schools
- High Schools
- Corporate Schools
- ▲ Public Libraries

TRANSPORTATION LINES

Interborough Rapid Transit (Subway System)

Hudson & Manhattan B.R.R. Tunnels

Bethune Tunnel

Elevated Railroads

Street Car Lines

Steam Railroads

Ferries

Borough Boundaries

Rivers

Canals

Harbors

Streams

Woods

Forests

Marshes

Swamps

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Visiting Classes Many teachers bring their pupils to the Museum for special study. For instance, when early American history is being studied the teachers plan an excursion to the Museum to examine the Indian collections. Whenever desired a trained instructor meets these visiting classes and **Expert Guidance** explains the exhibits. There have been times during the past season when the entire staff of the department was engaged in giving such instruction.

The most important new feature of the season's work is the plan of utilizing the Museum exhibits as a background for teaching history and as an introduction to the study of the beginning of human invention and industry. This scheme was suggested by Mrs. Vaughan, and she was given the problem of working it out. She prepared a course of ten lectures which were designed to cover the different stages in the development of human culture. There was a threefold purpose underlying this study: to give the background of history, to arouse interest in and respect for human labor and to show children how to view the Museum collections intelligently.

To test the efficiency of such instruction it was decided to try the experiment with a group of students who intended to make teaching their profession, rather than with a class of children. Accordingly the plans were outlined to the New York Training School for Teachers, and six of the students volunteered to take the course.

The first lesson introduced the general theme: the development of the human mind and the origins of society, as shown in material culture. On the blackboard was figured the table used by Professor Osborn, showing the glacial epochs in relation to the human races and culture stages, and the animals of the periods. The class then visited the collections of early human remains and the specimens from the early cultures of Europe.

Each lesson consisted of an outline, a short talk and an examination of objects in the exhibition halls. This illustrative material was selected with the greatest care; each lesson was prepared with close study of authorities, and consultation with members of the staff of the Department of Anthropology, who were cordially helpful.

While the results of this experiment are not conclusive, they are sufficient to emphasize the desirability of developing



STUDYING THE HOME LIFE WITHIN AN INDIAN TIPI

further this line of work, and there appears to be a splendid opportunity to make history and geography more intelligible to children. Further experiments in this line of work will be taken up in the fall.

IV. COMMENTS OF EMINENT EDUCATORS ON THE EDUCATIONAL WORK OF THE MUSEUM AS PRESENTED IN THE PRESIDENT'S *Annual Report* FOR 1913.

"The question covered by your report as to the particular investigation of public education and school education is one of very great interest and importance at this present time."

JOHN GRIER HIBBEN,

President, Princeton University

"I have noted particularly the reports of your educational work, and beg to send my congratulations on what you are accomplishing."

JOHN H. FINLEY,

President, The University of the State of New York

"I am gratified to see that the Museum is indeed making education and its problems a theme for research. I regard the usefulness of an institution such as yours dependent in some measure upon the contact it maintains with the world of education: especially with that part which is represented by our colleges and universities."

BENJAMIN IDE WHEELER,

President, University of California

"It is the record of a great and useful work in the cause of public education."

WILLIAM H. MAXWELL,

City Superintendent of Schools

"Of the educational value of the Museum's exhibits I was already well aware and feel a debt of gratitude to its officers and the city that supports it for the better understanding of nature on my own part and on that of my family, which frequent visits to the Museum afforded us during our residence in New York."

ERNEST FOX NICHOLS,

President, Dartmouth College

"If ever the schools were in danger of claiming a monopoly of education, such enterprises as this of yours must have awakened them from their dreaming. I am sure it is good for all of us who are engaged in educational work in the narrower sense to feel that the scope of the work is broader than our own endeavors."

ALEXANDER MEIKLEJOHN,

President, Amherst College

"At least yearly, during my visits to New York, I go to the Museum to note the improvements and additions. I have fully realized that in recent years, and especially since the naturalistic method of installation has been adopted, the Museum has become a great educational force for the state of New York and for the country."

CHARLES R. VAN HISE,
President, The University of Wisconsin

"I wish to thank you for the copy of the 45th Annual Report of the Trustees of the American Museum of Natural History, and to congratulate you again upon the great work the Museum is doing, both in the field of exploration, museum exhibits and education."

CHARLES D. WALCOTT,
Secretary, Smithsonian Institution

"It is always an extremely interesting document to me, and the last one is especially attractive. It is good to keep track of your ever increasing activities, and I regret that there should be even a brief halt in your building operations."

RICHARD RATHBUN,
*Assistant Secretary, In Charge
United States National Museum*

"I shall read all of it with much pleasure, but particularly that part relating to the educational work of the Museum. The extent and quality of this work should be very gratifying to you. It is an inspiration to the rest of us."

H. W. KENT,
*Secretary,
The Metropolitan Museum of Art*

"I am impressed by the fact that you are making a very successful effort to bring about coöperation between the Museum and the public school system of your city."

BARTON W. EVERMANN,
*Director,
California Academy of Sciences*

V. PROPOSED EXTENSION OF EDUCATIONAL WORK IN 1914 AND 1915

Through the Museum's recent educational work the institution has been brought into close relations with the educational system of the City, and through its invaluable collections from all parts of the world, its carefully installed exhibits and its corps of trained scientists, the Museum exerts a wide and growing influence in the community.

With the exception of the system of circulating nature study collections, all the present methods of Museum instruction necessitate the presence of teachers and pupils *at the Museum*. While it is desirable that children should visit the Museum as often as possible, the difficulties and dangers of travel and cost of transportation prohibit many thousands of pupils from coming to the Museum. A laborer who earns only \$2.00 per day can ill afford to pay twenty cents for car fare to send his son or daughter to the Museum, especially when this child is perhaps only one of five or six others who ought to have the same opportunities. It was with the desire to take the Museum treasures to these less favored children and to extend the influence of the Museum, that the Curator addressed the following letter to President Osborn:

April 15, 1914

My dear President Osborn:

For the past ten years, the Department of Public Education of the Museum has been devoting special attention to the establishment of close relations with the public schools and the educational system of the City. The principal features of this work have been the cabinets of natural history specimens, which have been circulated through the schools, and the various courses of lectures for school children delivered at the Museum. The methods adopted have met with such success that the teachers now regard our circulating collections and our lectures as important adjuncts, if not indispensable aids in their work.

In the past, the lectures have been given *only* at the Museum, after school hours, and attendance is voluntary. The large attendance at these lectures is very gratifying, for few realize what a strain it is upon a teacher to bring safely a class of twenty-five to fifty pupils to the Museum. She must get the written permission of the parents of each child before starting; she must take up this work when her normal day's work is finished; she must guard her pupils from accident on the streets. After the lecture is over, the teacher must take her pupils, at rush hours, back to the school and there dismiss them, and it is often eight o'clock in the evening before she reaches home for dinner.

In view of the severe strain on the teacher, the dangers incident to the transportation of children through the city streets and, most important of all, the fact that many parents cannot afford the necessary car fare, we believe that there is no extension of our educational work which would exert a wider influence and give more practical results than the establishment of a series of *LECTURE CENTERS*. The plan that we have in mind contemplates the selection of a centrally located school in each district in which would be given, by members of the Museum's staff, lectures similar to those now given for school children in our auditorium. This is a plan which scores of teachers have been urging for several years, but we have not been able to comply with these requests because our lecture force is small and our funds insufficient. With our present staff, however, it might be feasible to open half a dozen centers, but in order to supply the demand it will ultimately mean the training of a special corps of lecturers for this work.

Many requests are also received from teachers for the loan of lantern slides to illustrate subjects which they desire to present to their pupils. We have not been in a position to grant these requests, because our slides were not properly catalogued and we were not prepared to undertake the *LOAN SYSTEM*. Chiefly through the gift of Professor and Mrs. Bickmore, the Museum possesses a splendid series of lantern slides. Our collection numbers more than 30,000 slides, and since the Albany fire destroyed the original

negatives of the Bickmore slides our collection is probably the finest in this country. Sufficient progress has now been made in the cataloguing of our slide collections to enable us to undertake, in a limited way, the sending out of slides to the schools. It is especially desirable that the Museum should take up this work, since the State Department of Education at Albany is not in a position to supply the requests of the New York City teachers.

The effectiveness of nature study in the public schools of the City to-day is largely dependent upon the enthusiasm of the individual teacher and the accessibility of nature study material. Our present circulating collections are doing important work, inasmuch as they place in the hands of the teachers definite nature study material, but more effective results might be obtained if the teacher could have available a more extensive teaching collection. For this reason it would seem desirable to establish a *BRANCH TEACHING MUSEUM* in a number of centrally located schools. This could be accomplished if a case, say 8' x 7' x 1 $\frac{1}{2}$ ' was placed in each of the selected schools, and we installed a larger and more comprehensive teaching collection of natural history objects than is possible to send out in our regular circulating collections. The teachers of the district could then draw upon this material as required. The material in these cases should be changed periodically, perhaps three or four times a year, corresponding to changes in the course of study. The branch teaching museum should contain not only representative specimens of the animals that are being studied, but small portable groups illustrating the relations of certain animals to environment. Development along this line will involve considerable expense, for the cases should be uniform and the specimens in first-class condition. The problems of transportation and transfer could be handled by our present force. I feel that it would not be wise, however, to undertake the establishing of such branch museums as outlined above until the whole problem of nature study in the public schools has been considered, in order that it may be properly correlated with the nature study work required in the curriculum.

There are many problems to be solved in the working out of the details in the three lines of extension proposed above, but if the general policy meets with your approval, I should like to carry my investigations further and submit detailed plans to you.

Very truly yours,

GEORGE H. SHERWOOD

Curator

The plans for the proposed extension received the hearty support of President Osborn and he presented them to the Trustees at their meeting of May 4, 1914.

The Trustees felt that it was very desirable to undertake this work, but that, in view of what they were already doing for education without expense to the City, they could not provide the necessary funds for carrying out the proposed extension. They finally adopted the following resolution:

“RESOLVED, That the Board approves the general project embodied in Mr. Sherwood’s report, if the same can be carried out without expense to this institution.

“RESOLVED, That a Committee of Two be appointed by the President to take steps to carry out the project, if it can be accomplished.”

Pursuant to this action of the Trustees, President Osborn appointed the following Committee to consider the details of the plans proposed:

Felix M. Warburg
R. Fulton Cutting
} Trustee Members

George H. Sherwood
C.-E. A. Winslow
} Faculty Members

Meanwhile the Department of Public Education of the Museum arranged a course of three lectures, one on forestry, one on local birds and another on the Panama Canal, to be given as an experiment at Public School No. 64, 350 East 10th Street, and at the Washington Irving High School, East

17th Street. Public School No. 64 has an assembly hall seating about 1,000, and this was filled at each lecture with pupils from the neighboring schools. The auditorium of the Washington Irving High School has a seating capacity of 1,500, and in spite of stormy weather from 1,000 to 1,500 pupils were present at each lecture. Indeed, it was necessary to give the Panama lecture twice to accommodate all who desired to hear it. These lectures were sufficient to demonstrate the practicability and desirability of establishing local lecture centers.

The matter was brought to the attention of President Churchill of the Board of Education, who immediately appointed a special committee consisting of

Frank D. Wilsey

Ira S. Wile

Francis P. Cunnion

to consider with the Museum authorities plans for coöperation.

Chairman Wilsey called on President Osborn and made an examination of the educational work the Museum was already doing and of the plans for extending it. On the same day President Osborn had a conference with President Churchill who endorsed the plans and gave assurance of his cordial coöperation.

From the beginning the Curator has been in consultation with Superintendent Maxwell and Associate Superintendent Straubenmüller, both of whom have given much practical assistance in the formulation of the plans for the proposed extension.

After careful study of the problems involved, final plans for the extension work of the American Museum have been recommended to the Committees of the Trustees and of the Board of Education. These plans provide for:

1. The opening of ten local lecture centers and the delivery by members of the Museum staff of eighteen lectures in each center during the school year. The lectures are to be mainly on geographical, historical and industrial subjects, and will be fully illustrated.

2. The inauguration of a system of lending slides, which will place at the disposal of the teachers of the public schools, for use in their class rooms, the extensive series of lantern slides belonging to the Museum.
3. The establishment of a branch museum in the Washington Irving High School which will be a local museum for the lower east side of the City. It is planned to make the exhibits of such a character that they will serve both for teaching and exhibition purposes.

APPENDIX I

Nature-Study Collections

Loaned to the Public Schools by the
American Museum of Natural History

To meet the numerous requests received from teachers to supply them with nature-study material, the American Museum of Natural History has prepared several small collections of natural-history specimens, which will be loaned for short periods to the public schools of Greater New York. These collections are as follows:

Native Birds. Adapted for Grades 1A-4B:

Owl Set—Containing owl, chickadee, nuthatch, song sparrow, kinglet

Blue Jay Set—Containing blue jay, woodpecker, cross-bill, junco, English sparrow

Robin Set—Containing robin, red-winged blackbird, oriole, meadow-lark, chipping-sparrow

Bluebird Set—Containing bluebird, phœbe, barn swallow, house wren, chimney swift

Tanager Set—Containing scarlet tanager, red-eyed vireo, goldfinch, humming-bird and pigeon

Insects. Adapted for Grades 2A-5A:

Containing cynthia and cecropia moths, monarch butterfly, etc., and typical representatives of the different groups of insects

Special Insects. Adapted for Grades 2A-5A:

Containing life-history of cecropia moth, development of monarch butterfly, life and work of honey-bee and household insects

Mollusks. Adapted for Grades 4A and 5A:

Containing shells of about twenty-five mollusks, including specimens of the oyster, clam and chambered nautilus

Crabs. Adapted for Grade 5A:

Containing relatives of the common blue crabs

Starfishes and Worms. Adapted for Grades 4A and 5A:

Containing typical species of the two groups

Sponges and Corals. Adapted for Grades 4A and 5A:

Containing about fifteen species of corals and their relatives

Minerals and Rocks. Adapted for Grades 3B and 4A:

Containing twenty specimens of minerals and building stones

Native Woods. Adapted for Grades 2A and 5B:

Containing elm, hickory, maple, white birch, ailanthus, sweet-gum, sour-gum, chestnut, sycamore. Specimens show cross, longitudinal and oblique sections of the wood, characteristic bark, annual rings, etc.

PUBLIC HEALTH FOLIOS

Spread and Prevention of Communicable Disease:

Containing fifteen photographic charts illustrating how diseases are commonly spread and how they may be prevented

Insects and Disease:

Containing twelve photographic charts illustrating the life-histories of some common household insects, which carry disease. Conditions favorable for the breeding of these insects are also shown, as well as methods of extermination

Bacteria and Their Work in the World:

Containing eight photographic charts illustrating beneficial and harmful bacteria and their work

The specimens in the collections have been selected with a view to supplying material required in the Syllabus of Nature-Study issued by the Board of Education.

Each collection is accompanied by a set of notes, brief but in the nature of suggestions to teachers, giving facts on the structure, habits and characteristics of the particular species in the collection. To the notes is appended a bibliography of the subject treated.

Memoranda regarding the Loan of Circulating Collections:

1. Applications for the use of collections should be made by the Principal
2. Applications should be addressed to the Curator, Department of Public Education, American Museum of Natural History
3. Messengers of the Museum will deliver the collections and transfer them at the end of the loan periods, without expense to school or teacher
4. Collections may be retained for a period of three weeks

APPENDIX II

SCHOOLS RECEIVING MUSEUM EXTENSION

September, 1913, to June, 1914

PUBLIC SCHOOLS

Manhattan

Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43 Boys, 43 Girls, 44, 46, 48, 50, 51, 52, 53, 54, 56, 58, 59, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 98, 100, 101, 106, 107, 108, 109, 110, 112, 114, 117, 120, 121, 122, 124, 126, 127, 130, 131, 132, 137, 140, 141, 147, 150, 151, 157, 158, 159, 160, 161, 165, 166, 168, 170, 171, 174, 177, 179, 183, 184, 186, 188 Boys, 188 Girls, 190, 192.

Brooklyn

Nos. 2, 4, 5, 6, 7, 8, 10, 11, 12, 13, 16, 17, 18, 19, 20, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 37, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 57, 59, 60, 61, 62, 63, 64, 66, 67, 68, 69, 70, 72, 73, 74, 75, 77, 78, 79, 80, 82, 83, 84 Boys, 84 Girls, 86, 87, 88, 89, 91, 93, 94, 97, 98, 99, 100, 102, 103, 105, 106, 107, 108, 109, 110, 111, 112, 113, 115, 116, 117, 118, 119, 124, 125, 126, 128, 129, 130, 131, 132, 133, 135, 136, 137, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 154, 155, 156, 157, 158, 159, 160, 162, 163, 165, 167.

Bronx

Nos. 1, 2, 3, 4, 5, 6, 8, 9, 10, 10 Annex, 11, 13, 14, 15, 17, 18, 19, 21, 24, 25, 26, 26 Annex, 27, 28, 30, 32, 33, 34, 36, 37, 38, 39, 39 Annex, 40, 41, 42, 43, 44, 45, 47, 48.

Queens

Nos. 5, 6, 7, 8, 11, 12, 13, 15, 19, 21, 22, 23, 24, 27, 28, 29, 31, 32, 33, 34, 35, 39, 42, 46, 49, 54, 58, 61, 63, 65, 66, 68, 71, 72, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 88, 89, 92.

Richmond

Nos. 1, 2, 3, 4, 8, 9, 13, 14, 15, 17, 18, 19, 20, 21, 25, 26, 28,
29, 30, 31, 34.

Children's Aid Society Summer School

PUBLIC HIGH SCHOOLS AND COLLEGES

Manhattan

DeWitt Clinton High School

Washington Irving High School

Wadleigh High School

Wadleigh High School Annex

Normal College

Normal College Annex

New York Training School for Teachers

Julia Richman High School

“ “ “ “ Annex, West 104th Street

“ “ “ “ Annex, East 88th Street

New York Model School

New York Evening High School, 42d St.

“ “ “ “ Sheriff and Stanton Sts.

Manhattan Trade School for Girls

Brooklyn

Bushwick High School

“ “ “ Annex

Boys' High School

Commercial High School

“ “ “ Annex

Eastern District High School

Bay Ridge High School

Erasmus Hall High School

Bronx

Morris High School

Evander Childs High School

“ “ “ “ Annex

Bronx Evening High School

Queens

Bryant High School
Newton High School
Far Rockaway High School
Jamaica High School

New Jersey

Public School No. 11, Passaic
Washington Street School, Newark
Public School No. 14, Jersey City

CORPORATE SCHOOLS

Industrial Schools Nos. 1, 3, 5, 7, 8, 10, 11, 12.
Mott Street School
Home School
East Side Industrial School
Avenue B School
Rhinelander School
Jones Memorial School
Sixth St. School
Henrietta School
Protestant Half Orphan School
Madison House
Leake and Watts Orphan House
St. Patrick's School
53d Street School
Hebrew Orphan School
E. W. Blin Kindergarten
St. Alfonso's School
St. Agnes' School
Industrial School Association and Home for
Children, Brooklyn

PRIVATE SCHOOLS AND OTHER INSTITUTIONS

Manhattan

125th Street Branch Library
St. Agnes Branch Library
Main Library, 42d Street

179th Street Branch Library
Irving School (Private)
Froebel League "
Jacobi School "
Charlton School "
Research Laboratories
Chelsea Methodist Church
Studio of Applied Sculpture
Miss Chapin's School for Girls

Brooklyn

Pratt Institute
Pratt Art League

Bronx

New York University

SUMMARY
New York City

ELEMENTARY SCHOOLS

Manhattan	130
Brooklyn	132
Bronx	41
Queens	50
Richmond	22

PUBLIC HIGH SCHOOLS AND COLLEGES

All Boroughs	30
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CORPORATE SCHOOLS

All Boroughs	26
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PRIVATE SCHOOLS AND OTHER INSTITUTIONS

15

New Jersey

ELEMENTARY SCHOOLS

3

Total 449

APPENDIX III

CHILDREN'S LECTURES

AT THE

AMERICAN MUSEUM OF NATURAL HISTORY

SPRING OF 1914

THE American Museum of Natural History takes pleasure in announcing to the Principals and Teachers of the Schools of the City four courses of lectures on History, Geography, and Natural History. The lectures will be given by members of the Museum Staff and will be illustrated with lantern slides and moving pictures.

The lectures will begin at four and will close at or before five o'clock.

Applications for the reservation of seats must be received at the Museum not later than two days before the lecture. Seats cannot be reserved after four o'clock. Children must be accompanied by a teacher. When the attendance is large, we ask the coöperation of the teachers in keeping the children quiet in the rear of the hall.

In filling out the application blanks, the teacher must state the date of application, the date of the lecture, the number of pupils wishing to attend, the name of the teacher and the name and address of the school. On request, blanks will be furnished for this purpose. Owing to the demand for seats, teachers should not ask for more seats than they will require.

Address

GEORGE H. SHERWOOD

Curator, Department of Public Education

American Museum of Natural History

Six Lectures
on
THE EARLY HISTORY OF AMERICA
Illustrated with Lantern Slides and Moving Pictures
MONDAYS AT FOUR O'CLOCK

March 2 **Mrs. Vaughan**
THE COMING OF COLUMBUS
"The Sea of Darkness." Passage to India and the Spice Islands. The plans of Columbus. Isabella, Queen of Spain. The first voyage. Terror and mutiny overcome by the courage of Columbus. "Land, land." Other voyages of Columbus.
Moving Pictures

March 9 **Mrs. Vaughan**
EXPLORATION OF THE WEST
Spanish adventure and the search for gold. DeSoto's journeys and discovery of the Mississippi. How the perseverance of La Salle brought the French down the great river. The United States completes the exploration of the West.
Moving Pictures

March 16 **Mr. Miner**
SETTLEMENT OF NEW ENGLAND
The Pilgrims and their wanderings. Their sojourn in Holland. Settlement of Plymouth. Salem and Massachusetts Bay. Settlement of Rhode Island and Connecticut. Conquering the wilderness. Indian wars. Days before the Revolution.
Moving Pictures

March 23 **Mr. Skinner**
INSIDE THE INDIAN'S WIGWAM
Indians at home. Life on the plains and in the woodlands. "My Indian Wigwam." Adventures and tales of the Menomini and other tribes.
Moving Pictures

March 30 **Mr. Miner**
EARLY HISTORY OF NEW YORK
Discovery of Manhattan Island. Settlement of New Amsterdam. Early fur traders. New Amsterdam under Peter Stuyvesant. Conquest by the English. The British colony of New York. Early Dutch life and customs.
Moving Pictures

April 20 **Mr. Miner**
NEW YORK CITY TO-DAY
New York as the nation's capital. Progress in transportation on land and water. Bridges, buildings, monuments, schools, parks. Days of commercial supremacy of the nation's metropolis. Growth and prosperity of New York typical of that of the nation.
Moving Pictures

**Six Lectures
on
THE UNITED STATES
Illustrated with Lantern Slides and Moving Pictures
WEDNESDAYS AT FOUR O'CLOCK**

March 4	Dr. Fisher
GEOGRAPHY OF THE UNITED STATES	
The character of the country: Mountains, plains, plateaus, rivers, and lakes, with glimpses of some of the natural beauties and wonders.	
	Moving Pictures
March 11	Dr. Fisher
RIVER HIGHWAYS	
The origin and work of a river, with special reference to the Mississippi and to the Hudson. River valleys and flood plains. River Navigation.	
	Moving Pictures
March 18	Mr. Butler
THE MOUNTAINS	
The great chain of the Rockies. Foothills and peaks. Above the tree line. Snow in summer. Mineral wealth in rocks. Mountain animals and flowers.	
	Moving Pictures
March 25	Dr. Fisher
THE GREAT PLAINS	
Agriculture and grazing. Wheat from field to bread. Cornfields. Cattle industry. Cotton and wool.	
	Moving Pictures
April 1	Mrs. Vaughan
OUR GREAT NORTHERN TERRITORY	
Purchase from Russia. The extent of Alaska. Its great mineral wealth. The "Gold Rush." Life above the arctic circle. The Yukon, mighty river of the North. The chain of islands. Animal life.	
	Moving Pictures
April 22	Mr. Sherwood
THE FORESTS OF OUR COUNTRY	
The extent of our forests. Government reserves. Forests and the water supply. The uses of trees. Where does the paper come from that is used for newspapers and post cards?	
	Moving Pictures

Six Lectures
on
THE GEOGRAPHY OF THE WORLD
Illustrated with Lantern Slides and Moving Pictures
FRIDAYS AT FOUR O'CLOCK

March 6	Mrs. Vaughan
THE PANAMA CANAL	
Balboa and the Pacific. The long voyage around the Cape. The French and the Canal. How the United States has accomplished the great work. How ships will be taken through the Canal.	
	Moving Pictures
March 13	Mr. Rogers
GLIMPSES OF SOUTH AMERICA	
The Andes. Diamond mines. Santiago, Chile. Rubber. Robinson Crusoe's island. The end of the continent.	
	Moving Pictures
March 20	Dr. Fisher
SCENES IN ASIA	
Japan, China, India. School life in Japan. Curious customs of the people. Silk industry. Glimpses of crowded China. The Great Wall. India: Scenes at the Durbar. Life on the plains. Wild animals of India. The Himalayas.	
	Moving Pictures
March 27	Mrs. Vaughan
A SUMMER TRIP TO EUROPE	
London in sunshine. Cheerful days in France. A long overland journey. Glimpses of Germany and Austria, with snow-peaked mountains in the distance. Vast Russia. Life of the people. "White nights" in the North. Country life in Scandinavia.	
	Moving Pictures.
April 17	Dr. Fisher
AFRICAN DESERT AND JUNGLE	
Barbary and the Sahara. The Nile. Ancient Egypt. The interior of Africa. Wild beasts of the jungle. South Africa and the gold and diamond mines.	
	Moving Pictures
April 24	Mr. Rogers
MEXICO AND CENTRAL AMERICA	
Mexican scenery. The City of Mexico. Natives. Coffee and sugar. A trip up a volcano in Costa Rica.	
	Moving Pictures

A Course of Four Lectures
on
NATURAL HISTORY

Illustrated with Lantern Slides and Moving Pictures

THURSDAYS AT FOUR O'CLOCK

March 26

Mr. Miner

THE SEA CREATURES OF OUR SHORES

A lecture on the animals living near the low-tide mark along our shores, such as oysters, clams, crabs, starfishes, jellyfishes, and their kind. Their strange homes and habits of life. Their ingenious methods of obtaining food. Their importance to the sea world about them and to man.

Moving Pictures

April 2

Dr. Fisher

THE BIRDS OF OUR PARKS

Introduction to the birds. Color and markings of birds. Protective coloration. Nests and nest-building. Incubation. Two kinds of nestlings. Step-parents among birds. How some young birds are fed. Bird calls and songs. Bird migration. Value of birds.

Moving Pictures

April 16

Mr. Anthony

**FUR-BEARERS FOUND WITHIN FIFTY MILES
OF NEW YORK CITY**

“Fur-bearers” to include all mammals. Former abundance and present scarcity of some fur-bearers. Animals our forefathers found, animals any of us may see. Mammals ranging in size from the shrew, no larger than the little finger, to the huge whale. Animals that prey and those that are preyed upon. Dwellers in plain, forest, mountain, river, and sea. Runners, climbers, flyers, diggers, and swimmers. Brief descriptions of their habitats and of their most interesting traits.

Moving Pictures

April 23

Dr. Fisher

WILD FLOWERS OF THE VICINITY OF NEW YORK CITY

Flowering plants and non-flowering plants. Naked-seeded plants and those with seeds enclosed. Plants with one seed-leaf and those with two. How seeds are scattered. Some plants which entrap insects. Parasitic plants. Some flowers of the salt marshes and some of the pine barrens. Harbingers of spring. Some wild flowers which are in danger of being exterminated in this vicinity.

Moving Pictures

APPENDIX IV

CLASSES VISITING THE MUSEUM FOR LECTURES AND SPECIAL INSTRUCTION

September, 1913, to June, 1914

PUBLIC SCHOOLS

Manhattan

Nos. 1, 2, 3, 4, 6, 9, 10, 11, 12, 13, 14, 17, 22, 23, 25, 27, 28,
29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 46, 48, 50,
51, 53, 54, 56, 57, 58, 59, 60, 62, 63, 65, 68, 69, 70, 71, 72, 73, 74,
76, 77, 78, 79, 83, 84, 85, 86, 87, 88, 90, 91, 92, 93, 94, 95, 96, 101,
104, 105, 106, 107, 109, 114, 117, 119, 121, 127, 132, 141, 147, 150,
151, 152, 157, 159, 160, 161, 165, 166, 168, 170, 171, 172, 179, 184,
186, 188, 190.

College of the City of New York

DeWitt Clinton High School

High School of Commerce

High School of Commerce Annex

New York Model School

New York Training School for Teachers

Model School, Normal College

Normal College High School

Manhattan Trade School for Girls

Vocational School for Boys

Washington Irving High School

Wadleigh High School

Brooklyn

Nos. 17, 18, 32, 47, 50, 53, 54, 55, 59, 64, 65, 83, 104, 119,
139, 155.

Bay Ridge High School

Bushwick High School

Manual Training High School

Bronx

Nos. 1, 2, 4, 8, 9, 10, 11, 15, 20, 25, 26, 27, 30, 33, 36, 37, 39,
44, 45, 48.

Morris High School

Queens

Nos. 4, 5, 6, 13, 22, 24, 35, 50, 59, 63, 75, 76, 78, 86.

Bryant High School

Jamaica High School

Richmond Hill High School

Richmond

No. 25

Curtis High School

PAROCHIAL SCHOOLS

St. Alphonsus, Brooklyn

St. Cecelia, Englewood, N. J.

St. Patrick's, Jersey City

Most Holy Trinity, Brooklyn

PRIVATE SCHOOLS

New York

Academy of St. Augustine, Larchmont Manor

Adelphi Academy, Brooklyn

Bedford Academy, Brooklyn

Berkeley Institute, Brooklyn

Browning School, N. Y. City

Miss Chaires' School, N. Y. City

The Castle, Tarrytown

Charlton School, N. Y. City

Ethical Culture School, N. Y. City

Finch School, N. Y. City

Froebel League, N. Y. City

Hebrew Technical Institute, N. Y. City

Horace Mann School, N. Y. City

New York Collegiate School

Packer Collegiate Institute, Brooklyn
Robertson Day School, N. Y. City
St. Agatha, N. Y. City
St. Joseph Institute, Westchester
Spencer School, N. Y. City
Staten Island Academy, New Brighton, S. I.
Teachers' College, N. Y. City

New Jersey

Columbia School, South Orange, N. J.
Millington S. School, Millington, N. J.
Montclair School, Montclair, N. J.
St. Elizabeth College, Convent, N. J.
St. Mary's School, Elizabeth, N. J.

OTHER INSTITUTIONS

Boy Scouts of America
Bushwick Avenue Baptist Sunday School, Brooklyn
Camp Fire Girls, Brooklyn
Camp Fire Girls, Port Chester, N. Y.
Chapel of the Comforter, N. Y. City
Emerson Club, Christodora House, N. Y. City
Lenox Hill Settlement, N. Y. City
New York Fire Insurance Exchange
New York State Commission for the Blind, N. Y. City
New York Public Library
Mount Vernon Public Library
Columbia University
Recreation Rooms and Settlement, N. Y. City
Sixth Avenue Baptist Sunday School, Brooklyn
Wahkeeto Camp Fire, Rutherford, N. J.

Public Schools Outside of New York City

Battin High School, Elizabeth, N. J.
High School, Hackensack, N. J.
Kearney High School, Kearney, N. J.
East Side High School, Newark, N. J.
High School, Verona, N. J.

Union Hill High School, Town of Union, N. J.
 Mount Vernon High School
 New Rochelle High School
 No. 5, Arlington, N. J.
 No. 2, Edgewater, N. J.
 No. 3, Hackensack, N. J.
 No. 9, Jersey City
 No. 17, Jersey City
 No. 4, Lakeview, N. J.
 Abington Ave., Newark, N. J.
 Ann St. School, Newark, N. J.
 Chestnut St. School, Newark, N. J.
 Cleveland School, Newark, N. J.
 No. 11, Passaic, N. J.
 Public School, Ridgefield Park, N. J.
 Washington School, Westfield, N. J.
 No. 16, Wakefield
 Huguenot Street School, New Rochelle, N. Y.
 No. 6, Yonkers, N. Y.
 No. 8, " " "
 No. 10, " " "
 No. 20, " " "

SUMMARY
New York City

ELEMENTARY SCHOOLS

Manhattan	102
Brooklyn	16
Bronx	20
Queens	14
Richmond	1

PUBLIC HIGH SCHOOLS AND COLLEGES

All Boroughs	20
--------------	----

PAROCHIAL SCHOOLS

	4
--	---

PRIVATE SCHOOLS AND OTHER INSTITUTIONS

	41
--	----

OUTSIDE OF NEW YORK CITY

Elementary Schools	19
High Schools	8
Total	245

SECOND ANNUAL REPORT

OF THE

PENSION BOARD

OF

THE AMERICAN MUSEUM
OF NATURAL HISTORY

FOR THE YEAR 1914

MISCELLANEOUS PUBLICATIONS OF
THE AMERICAN MUSEUM OF NATURAL HISTORY, NO. 6

NEW YORK

February 1, 1915

SECOND ANNUAL REPORT
OF THE
PENSION BOARD
OF
THE AMERICAN MUSEUM
OF NATURAL HISTORY

FOR THE YEAR 1914

MISCELLANEOUS PUBLICATIONS OF
THE AMERICAN MUSEUM OF NATURAL HISTORY, NO. 6

NEW YORK
February 1, 1915

OFFICERS AND MEMBERS OF PENSION BOARD

1914

Chairman

FELIX M. WARBURG

Vice-Chairman

RALPH W. TOWER

Treasurer

CHARLES LANIER

Secretary

GEORGE N. PINDAR

TRUSTEE MEMBERS

ANSON W. HARD

PERCY R. PYNE

ADRIAN ISELIN, JR.

FELIX M. WARBURG

EMPLOYEE MEMBERS

HARRY F. BEERS

RALPH W. TOWER

GEORGE N. PINDAR

To the President and Trustees of The American Museum of Natural History and to the Subscribers to the Pension Fund:

The Pension Board takes pleasure in submitting for your consideration its report for the fiscal year ending December 31, 1914.

During the past year the Pension Board has noted with pleasure the satisfactory fulfilment of the purposes of the establishment of the Pension Plan for this institution: adequate provision for aged employees, life insurance protection for the families of deceased subscribers and practical relief extended in cases of distress.

Death has invaded the ranks and called from their labors four members, of whom particular mention is made in another part of this report. One employee was retired.

It is worthy of comment that in no case has the ratio of death or retirement exceeded the calculations of the actuary at the time the rules were formulated, and a recent examination of the fund, by Mr. S. Herbert Wolfe, who very kindly offered his services for the purpose, indicates that the system is operating on a sound financial basis.

The first draft of the present rules contained provisions for the payment of a pension to the widow, children or other dependents of deceased employees who had been in the service not less than ten nor more than fifteen years, of a single payment equal to one-half of such deceased employee's annual salary, but if the employee had been in the service less than ten years then the dependents were to receive the amount of the deceased employee's contribution with simple interest, and the further provision that if such deceased employee's term of service exceeded fifteen years, regardless of age, then such dependents were to receive one-half of the pension the said employee would have received had he

or she been of retireable age and allowed a pension during his or her lifetime. After consultation with the actuary, these provisions, unfortunately, had to be withdrawn because of the lack of an endowment fund of such proportions as would provide an income sufficient to insure the payment of the gratuities as they accrued. In lieu thereof the present insurance feature was adopted, and after carefully observing its operation the Pension Board has every reason for expressing the belief that it more efficiently supplies the intended relief.

The incorporation of provisions, such as first mentioned, proves very costly and has frequently caused the collapse of otherwise meritorious systems. The experience of the Pension Board, working under the present rules, indicates that the average family, suddenly bereft of the wage-earner, treats the gratuity given as a simple life insurance payment for which the premiums have been regularly paid. In so far as the Pension Board has been able to ascertain, this gratuity has been used principally in the same manner as ordinary industrial insurance; the family has quickly adjusted itself to the new conditions and would deprecate the continuance of payments made in any paternalistic manner.

There may arise, however, the exceptional case where a continuance of limited amounts may be temporarily required; for such cases provisions have been made and the needed relief will be extended.

The records of the past year show that, to a great extent, the employees other than those engaged in scientific work, are transitory. These changes of employment would indicate that the employees recognize that the establishment of the Pension Plan was not intended as a means of tying them to their positions or of discouraging them from changing employers, but on the contrary appreciate that their interests are protected while in the service and that upon leaving, either voluntarily or through dismissal, there is returned to them the amount of their accumulated contributions with interest.

Under such conditions the system has served the dual purpose of affording a mandatory savings fund and true social insurance.

" An inspection of the sums paid for gratuities and pensions shows that the contributions received from the subscribers were in very small proportion to the amounts involved, and the Pension Board is of the opinion that if other provision can be made, these payments should not be taken from the joint accumulated contributions of the subscribers but rather from the income of an endowment fund established for this purpose, as "it is apparent that the expenditure of any considerable amount for such purpose during the early history of the plan may render it difficult to meet the future obligations which have been assumed by the acceptance of regular contributions from the subscribing employees."

The Pension Board would therefore recommend that solicitations be made for the creation of a substantial endowment fund. If such a fund should be raised it would be advisable to amend the rules so as to limit the expenditure of its income, for a period, to the payment, according to the rules, of gratuities and "retirements allowed subscribers who will not have contributed a sum proportionate to the obligation."

Respectfully submitted,

FELIX M. WARBURG

Chairman

February 1, 1915

Deceased Subscribers

It is with deep regret that we record the death of the following subscribers during the year 1914:

WILLIAM A. DOLAN

William A. Dolan was born on October 7, 1874, in Tarrytown, New York. In January, 1901, he entered the service of the Museum and was assigned to the Department of Taxidermy where he devoted his time principally to the tanning of the skins of mammals required for mounting. His cordiality won for him a host of friends among the employees and his skilful workmanship merited the frequent approval of the officials of the Museum. He died on February 24, 1914.

JOHN A. GROSSBECK

John A. Grossbeck was born on February 2, 1883, in Paterson, New Jersey. He came to the Museum about four years ago, having previously been connected with the New Jersey Experiment Station. Mr. Grossbeck as an Assistant in the Department of Invertebrate Zoölogy had charge of the Lepidoptera, specializing in Geometridæ. His investigations in Entomology were rapidly gaining for him an enviable reputation among the workers in this branch of science. In recognition of his gift, a valuable collection of insects, he was elected a Patron of the Museum. He died in Barbados on April 8, 1914.

CHRISTIAN HUNDERPFUND

Christian Hunderpfund was born on January 19, 1863, in New York City. He was attached to the custodian's force where he served for twelve years. His genial courtesy made him ever welcome in groups of his co-workers and the efficient manner in which he performed his duties always met with approval. He died on April 18, 1914.

CHRISTOPHER SCHROTH

Christopher Schroth was born on January 4, 1856, in Ellmendingen, Baden, Germany. He entered the employment of the Museum in 1898 and was assigned to the custodian's force. The pride he took in his work was most noticeable. His cheerful greetings, even during the period of his protracted illness, form a pleasant memory of an agreeable man and a faithful worker. He died on September 18, 1914.

RETIREMENTS

Name.	Position.	Date Effective.	Period of Service.
Francis McGuire....	Asst. Engineer..	March 1, 1914..	15 yrs.

STATUS OF MEMBERSHIP

Number of Subscribers January 1, 1914.....	216
New Subscribers	31
Re-instatements	3 250
<hr/>	
Retirements	1
Resignations	*14
Dismissals	8
Deaths	4 27
<hr/>	
Number of Subscribers December 31, 1914.....	223

*Includes one resignation with application for retirement.

FINANCIAL STATEMENT
OF THE
PENSION FUND
OF THE
AMERICAN MUSEUM OF NATURAL HISTORY

1914

INVESTED FUNDS

ENDOWMENT FUND	\$1,127.74
INVESTED FUND	18,872.26
	————— \$20,000.00

PENSION BOARD OF THE AMERICAN MUSEUM OF NATURAL HISTORY

RECEIPTS

1914

CASH ON HAND JANUARY 1, 1914..... \$9,108.55

CONTRIBUTIONS OF SUBSCRIBING EMPLOYEES:

DEDUCTIONS OF 3% FROM PAYROLLS OF	
CITY MAINTENANCE ACCOUNT.....	\$4,888.66
GENERAL ACCOUNT.....	2,448.08
SPECIAL FUNDS ACCOUNT.....	81.20
CORPORATE STOCK ACCOUNT.....	367.47
INCIDENTAL ACCOUNT.....	48.31
CROCKER LAND EXPEDITION FUND	
ACCOUNT.....	.07
	\$7,833.79

PERSONAL CONTRIBUTIONS OF SUBSCRIBING
EMPLOYEES

170.27

INTEREST ON DEFERRED CONTRIBUTIONS.....

1.60 8,005.66

CONTRIBUTIONS OF BOARD OF TRUSTEES

TO EQUAL CONTRIBUTIONS OF SUBSCRIBING EM-	
PLOYEES	8,005.66

INTEREST ON LEAVE OF ABSENCE PAYMENTS..... .17

INTEREST ON REPAYMENT OF CONTRIBUTIONS AND
INTEREST

.87

RETURN OF CONTRIBUTIONS..... 68.78

INTEREST ON CONTRIBUTIONS RETURNED..... .79

INTEREST ON ENDOWMENT FUND..... 50.74

INTEREST ON INVESTMENT FUND..... 340.37

INTEREST ON CREDIT BALANCES:

EARNINGS TO DECEMBER 31, 1914.....	201.00
------------------------------------	--------

INVESTMENT FUND

27.50

BURSAR'S ACCOUNT

500.00

\$26,310.09

Examined and *{*ADRIAN ISELIN, JR. *{*Auditing
Approved *{*PERCY R. PYNE *{*Committee

DISBURSEMENTS

1914

RETURN OF CONTRIBUTIONS.....	\$607.39
INTEREST ON CONTRIBUTIONS RETURNED.....	11.95
	<hr/>
SERVICE PENSION	231.25
DEATH GRATUITIES PAID UNDER SECTION 13	1,574.00
	<hr/>

PURCHASE OF SECURITIES:

INVESTMENT FUND	14,306.25
LOAN ACCOUNT	500.00

CASH ON HAND DECEMBER 31, 1914:

DEPOSITED WITH UNITED STATES TRUST COMPANY OF NEW YORK.....	8,579.25
DEPOSITED WITH COLONIAL BANK (BURSAR'S ACCOUNT)	500.00
	<hr/>

\$26,310.09

CHARLES LANIER, *Treasurer*

E. & O. E.
NEW YORK, December 31, 1914

PENSION FUND—SPECIAL FUNDS ACCOUNT

RECEIPTS

1914

SPECIAL CONTRIBUTIONS No. 1:

CLEVELAND H. DODGE.....	\$25.00
ADRIAN ISELIN, JR.....	25.00
ARTHUR CURTISS JAMES.....	25.00
A. D. JUILLIARD.....	25.00
J. P. MORGAN.....	25.00
HENRY FAIRFIELD OSBORN.....	25.00
FELIX M. WARBURG.....	50.00
	<hr/>
	\$200.00

Examined and { ADRIAN ISELIN, JR. } *Auditing*
Approved { PERCY R. PYNE } *Committee.*

in account with CHARLES LANIER, TREASURER

PENSION FUND—SPECIAL FUNDS ACCOUNT

DISBURSEMENTS

1914

SPECIAL CONTRIBUTION NO. 1:

PAYMENT FOR RELIEF..... \$150.00

CASH ON HAND DECEMBER 31, 1914:

DEPOSITED WITH THE UNITED STATES TRUST COMPANY OF	
NEW YORK	50.00

	\$200.00

CHARLES LANIER, *Treasurer*

E. & O. E.

NEW YORK, December 31, 1914

THIRD ANNUAL REPORT
OF THE *not a day*
PENSION BOARD
OF
THE AMERICAN MUSEUM
OF NATURAL HISTORY

FOR THE YEAR 1915

MISCELLANEOUS PUBLICATIONS OF
THE AMERICAN MUSEUM OF NATURAL HISTORY, NO. 7

NEW YORK
February 1, 1916

THIRD ANNUAL REPORT
OF THE
PENSION BOARD
OF
THE AMERICAN MUSEUM
OF NATURAL HISTORY

FOR THE YEAR 1915

MISCELLANEOUS PUBLICATIONS OF
THE AMERICAN MUSEUM OF NATURAL HISTORY, No. 7

NEW YORK
February 1, 1916

OFFICERS AND MEMBERS OF PENSION BOARD

1915

Chairman

FELIX M. WARBURG

Vice-Chairman

RALPH W. TOWER

Treasurer

CHARLES LANIER

Secretary

GEORGE N. PINDAR

TRUSTEE MEMBERS

ANSON W. HARD

PERCY R. PYNE

ADRIAN ISELIN, JR.

FELIX M. WARBURG

EMPLOYEE MEMBERS

HARRY F. BEERS

RALPH W. TOWER

GEORGE N. PINDAR

*To the President and Trustees of the American Museum of
Natural History and to the Subscribers to the Pension Fund:*

I have the honor to transmit to you herewith the Third Annual Report on the activities of the Pension Board and on its financial operations for the fiscal year terminating December 31, 1915.

FELIX M. WARBURG

Chairman

February 1, 1916

It is with deep regret that we are obliged to report the death of two of our subscribers who have been in the service of the Museum for a considerable period, particular mention concerning whom will be found in another part of this report.

The incorporation in the Rules of equitable insurance features, which afford liberal protection to the employee's family, without additional cost to the subscriber, has again demonstrated that the Pension Plan of this institution extends its provisions beyond those usually included in pension systems.

Inquiries made at different times lead us to believe that in many instances there is a tendency upon the part of individuals to neglect to give due heed to threatened illness and that, owing to lack of facilities, proper care is not given to the sick. In view of these facts and the number of recent serious cases in which major operations have been required, and also of the fact that at the present time there exist among various employees and members of their families physical ailments that make immediate attention imperative, it has been suggested that it might be desirable to enter into working relations, by endowment or otherwise, with some centrally located hospital in order that proper treatment may be given, especially to those employees and members of their families who are unable to bear the cost of expert care, the applications for assignments to such hospital to be under the control of the Pension Board.

During the past year, through the generosity of friends, the Pension Board has been able to continue to extend relief to the families of deceased subscribers; it has obtained employment for worthy members of such families; secured medical advice, and had minor operations performed upon individuals unable to provide the means for such necessary treatment. Mention of these facts is made only for the purpose of calling attention to the scope of the work of the Pension Board, the humanitarian provisions incorporated in the Rules and Regulations and the highly commendable efforts on the part of the administrative officers of the institution to endeavor in all possible ways not alone to promote the general welfare of its employees.

but also to aid those in distress, extending this alleviation even where the relationship of employer and employee has ceased.

At this time we would express our appreciation to those friends who have responded, from time to time, to our solicitations for funds, medical treatment, etc., which have enabled the Pension Board to carry out this portion of the work without impairment of its General Fund Account.

We now have 235 contributing subscribers and one retired employee. During the fiscal year, 17 employees who were subscribers resigned or were dismissed from the service, and 30 new employees, together with one employee who attained his majority, were accepted as subscribers. One petition for a pension was denied. In connection with this last case, however, it must be stated that the Pension Board was powerless to grant the request, as it was found, to the applicant's entire satisfaction, that the circumstances under which the request for pension was filed did not exist. The Pension Board has recommended the re-employment of this applicant.

The following tables show the ages of subscribers (1), and their terms of service (2), at their anniversary date during the current year.

(1)

No. of subscribers between the ages of 18 yrs. and 25 yrs..21										
..	..	"	"	"	"	"	25	"	"	30 " ..25
..	..	"	"	"	"	"	30	"	"	35 " ..26
..	..	"	"	"	"	"	35	"	"	40 " ..43
..	..	"	"	"	"	"	40	"	"	45 " ..31
..	..	"	"	"	"	"	45	"	"	50 " ..27
..	..	"	"	"	"	"	50	"	"	55 " ..18
..	..	"	"	"	"	"	55	"	"	60 " ..20
..	..	"	"	"	"	"	60	"	"	65 " .. 9
..	..	"	"	"	"	"	65	"	"	70 " ..11
..	..	"	"	"	"	"	70	"	"	75 " .. 3
..	..	"	"	"	"	"	75	"	"	80 " .. 1

(2)

No. of subscribers in the service	1 yr.	to	5 yrs.....	80
" "	" "	" "	5 yrs. " 10 "	70
" "	" "	" "	10 " " 15 "	36
" "	" "	" "	15 " " 20 "	33
" "	" "	" "	20 " " 25 "	12
" "	" "	" "	25 " " 30 "	2
" "	" "	" "	30 " " 35 "	1
" "	" "	" "	35 " " 40 "	1

We are especially indebted to Mr. S. Herbert Wolfe for his services in making an examination of the operations of the Pension Fund. Mr. Wolfe, in a recent letter, makes the following comments: * * * "I am pleased to be able to advise you that its condition [the Pension Fund] appears to be excellent. The mortality experienced is well within the expected mortality upon which the Fund was predicated, and the manner in which its funds have been invested has produced an interest revenue considerably in excess of that assumed in its calculations."

We are also profoundly grateful to Mr. Lewis L. Delafield for the legal advice and counsel which he has at various times given the Pension Board.

Deceased Subscribers

IGNAZ MATAUSCH

Ignaz Matausch was born on September 1, 1859, in Budweis, Austria. During his early manhood he was employed in constructing models for the private museum of Duke Schwarzenberg. Eleven years ago he entered the service of the Museum as a preparator in the Department of Invertebrate Zoölogy. As an entomologist Mr. Matausch made interesting investigations on the life history of the Membracidae, or Leaf Hoppers, and published several papers concerning this group of insects. His greatest achievement was along lines of modeling. He possessed a remarkable faculty for close observation and imitation, a keen eye for detail and a sensitive appreciation for color and form. Particularly interesting are the enlarged insect models which he prepared for the Department of Public Health. He died on December 14, 1915.

FREDERIC SEYFERT

Frederic Seyfert was born on October 17, 1867, in Rendsburg, Germany. He entered the service of the Museum in 1908 and was assigned to the custodian's force. The efficient manner in which he performed his work always met with the approval of the officials of the Museum. He was possessed of a most happy disposition and his genial cordiality readily won for him a hearty welcome among his fellow workers. These attributes form pleasant memories of an amiable man and a loyal employee. He died on October 22, 1915.

RETIREMENTS

Name.	Former Position.	Date Effective.	Period of Service.
Francis McGuire....	Asst. Engineer..	March 1, 1914..	15 yrs.

STATUS OF MEMBERSHIP

Number of Subscribers January 1, 1915.....	223	
New Subscribers.....	31	254
Resignations	11	
Dismissals	6	
Deaths	2	19
Number of Subscribers December 31, 1915.....		235

FINANCIAL STATEMENT

INVESTED FUNDS

Endowment Fund.....	\$1,127.74
Investment Fund.....	<u>38,872.26</u> \$40,000.00

LIST OF SECURITIES OF THE PENSION FUND

\$5,000—Southern Pacific Co. 4½% Equipment Bonds. Due 1923.
5,000—Union Pacific R. R. Co. 4% 1st Lien and Refunding Mtg. Bonds. Due 2008.
5,000—Chicago & Northwestern Ry. Co. 4% Genl. Mtg. Bonds. Due 1987.
5,000—Delaware & Hudson Co. 4½% 1st Lien Equipment Bonds. Due 1922.
5,000—Illinois Central R. R. Co. and Chicago, St. Louis & New Orleans R. R. Co. 5% Joint 1st and Refunding Mtg. Bonds. Due 1963.
5,000—Pennsylvania R. R. Co. 4½% Genl. Mtg. Bonds. Due 1965.
5,000—Pennsylvania Co. 4½% Gold Loan Bonds (Temporary Cts.) Due 1921.
5,000—Baltimore & Ohio R. R. Co. 5% Refunding Mtg. Bonds. Due 1995.

PENSION BOARD OF THE AMERICAN MUSEUM OF NATURAL HISTORY

PENSION FUND ACCOUNT

RECEIPTS.

1915

CASH ON HAND JANUARY 1, 1915. \$9,079.25

CONTRIBUTIONS OF SUBSCRIBING EMPLOYEES:

DEDUCTIONS OF 3% FROM PAYROLLS OF	
CITY MAINTENANCE ACCOUNT.	\$4,937.72
GENERAL ACCOUNT.	3,033.69
SPECIAL FUNDS ACCOUNT.	64.84
CORPORATE STOCK ACCOUNT.	4.56
INCIDENTAL ACCOUNT.	35.59
	<hr/>
	\$8,076.40

PERSONAL CONTRIBUTIONS OF SUBSCRIBING	
EMPLOYEES	214.21
	<hr/>
	8,290.61

CONTRIBUTIONS OF BOARD OF TRUSTEES

TO EQUAL CONTRIBUTIONS OF SUBSCRIBING EM-	
PLOYEES	8,290.61

INTEREST ON INVESTMENT FUND.	1,150.78
-----------------------------------	----------

INTEREST ON ENDOWMENT FUND.	50.74
----------------------------------	-------

INTEREST ON CREDIT BALANCES.	187.92
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BURSAR'S ACCOUNT.	500.00
	<hr/>

	\$27,549.91
--	-------------

Examined and { ADRIAN ISELIN, JR. } *Auditing*
 Approved { PERCY R. PYNE } *Committee*

PENSION FUND ACCOUNT

DISBURSEMENTS

1915

RETURN OF CONTRIBUTIONS.....	\$575.36
INTEREST ON CONTRIBUTIONS RETURNED.....	15.87
SERVICE PENSION.....	277.50
DEATH GRATUITIES PAID UNDER SECTION 13..	918.90
<hr/>	
PURCHASE OF SECURITIES:	
INVESTMENT FUND.....	19,863.19
EXPENSES.....	58.57
LOAN ACCOUNT.....	500.00
<hr/>	
CASH ON HAND DECEMBER 31, 1915:	
DEPOSITED WITH U. S. TRUST CO. OF N. Y....	\$4,840.52
DEPOSITED WITH COLONIAL BANK (BURSAR'S ACCOUNT)	500.00
	5,340.52
	<hr/>
	\$27,549.91

CHARLES LANIER, *Treasurer*

E. & O. E.

NEW YORK, December 31, 1915

PENSION BOARD OF THE AMERICAN MUSEUM OF NATURAL HISTORY

PENSION FUND—SPECIAL FUNDS ACCOUNT

RECEIPTS.

1915

SPECIAL CONTRIBUTIONS No. 1:

CASH ON HAND JANUARY 1, 1915..... \$50.00

SPECIAL CONTRIBUTIONS No. 2:

CLEVELAND H. DODGE.....	\$25.00
ADRIAN ISELIN, JR.....	30.00
ARTHUR CURTISS JAMES.....	15.00
A. D. JUILLIARD.....	15.00
CHARLES LANIER.....	15.00
OGDEN MILLS.....	15.00
J. P. MORGAN.....	15.00
HENRY FAIRFIELD OSBORN.....	15.00
FELIX M. WARBURG.....	25.00

170.00

INTEREST ON CR. BALANCES:

EARNINGS TO DECEMBER 31, 1915.....	10.60
------------------------------------	-------

10.60

\$230.60

Examined and $\left\{ \begin{matrix} \text{ADRIAN ISELIN, JR.} \\ \text{PERCY R. PYNE} \end{matrix} \right\}$ *Auditing Committee*
Approved

in account with CHARLES LANIER, TREASURER

PENSION FUND—SPECIAL FUNDS ACCOUNT

DISBURSEMENTS

1915

SPECIAL CONTRIBUTIONS No. 1:

PAYMENT FOR RELIEF..... \$50.00

SPECIAL CONTRIBUTIONS No. 2:

PAYMENT FOR RELIEF..... 150.00 _____ \$200.00

CASH ON HAND DECEMBER 31, 1915:

DEPOSITED WITH U. S. TRUST CO. OF N. Y.....	30.60

	\$230.60

CHARLES LANIER, *Treasurer*

E. & O. E.

NEW YORK, December 31, 1915

not a day

THIRD ANNUAL REPORT
OF THE
PENSION BOARD
OF
THE AMERICAN MUSEUM
OF NATURAL HISTORY

FOR THE YEAR 1915

MISCELLANEOUS PUBLICATIONS OF
THE AMERICAN MUSEUM OF NATURAL HISTORY, NO. 7

NEW YORK
February 1, 1916

THIRD ANNUAL REPORT
OF THE
PENSION BOARD
OF
THE AMERICAN MUSEUM
OF NATURAL HISTORY

FOR THE YEAR 1915

MISCELLANEOUS PUBLICATIONS OF
THE AMERICAN MUSEUM OF NATURAL HISTORY, NO. 7

NEW YORK
February 1, 1916

OFFICERS AND MEMBERS OF PENSION BOARD

1915

Chairman

FELIX M. WARBURG

Vice-Chairman

RALPH W. TOWER

Treasurer

CHARLES LANIER

Secretary

GEORGE N. PINDAR

TRUSTEE MEMBERS

ANSON W. HARD

ADRIAN ISELIN, JR.

PERCY R. PYNE

FELIX M. WARBURG

EMPLOYEE MEMBERS

HARRY F. BEERS

GEORGE N. PINDAR

RALPH W. TOWER

To the Members of the American Museum of Natural History:

This copy of the Report of the Pension Board is transmitted to you with the belief that you will be interested and gratified to note the development and growth of the most progressive movement ever inaugurated, by an institution of a character similar to ours, providing an adequate pension and retirement system for employees of mature age or long terms of service.

The Pension Plan was established in March, 1913, and all permanent employees were given the option to participate in it.

It is distinctively a coöperative, contributory system, the subscribing employees contributing 3 per cent of their salaries and the Trustees contributing an equal amount to the Fund.

The Plan provides:

1. Pensions—Six classes of pensions, according to length of service and age, the pensions varying from 25 per cent to 50 per cent of the average salary of the last three years.
2. Health Insurance—Gratuity to the employee in case he is totally disabled through illness.
3. Life Insurance—A gratuity to a beneficiary, in the event of the death of the employee, and under certain conditions in the event of the death of a pensioner.
4. For the return of the employee's contribution with simple interest at 3 per cent in case the employee leaves the service of the Museum before he is eligible for a pension.

The Plan also makes provision for exceptional cases: leave of absence without pay; absence from the service for a certain period; return to the service, and the reduction of present rate of contribution when feasible.

We trust that after reading this brief synopsis of the Plan you will agree with the Museum authorities that a broad, comprehensive and equitable system has been instituted for the protection of the worker and for the benefit of the efficient, faithful and long service employee.

Very truly yours,

HENRY FAIRFIELD OSBORN

February 1, 1916.

*To the President and Trustees of the American Museum of
Natural History and to the Subscribers to the Pension Fund:*

I have the honor to transmit to you herewith the Third Annual Report on the activities of the Pension Board and on its financial operations for the fiscal year terminating December 31, 1915.

FELIX M. WARBURG

Chairman

February 1, 1916

It is with deep regret that we are obliged to report the death of two of our subscribers who have been in the service of the Museum for a considerable period, particular mention concerning whom will be found in another part of this report.

The incorporation in the Rules of equitable insurance features, which afford liberal protection to the employee's family, without additional cost to the subscriber, has again demonstrated that the Pension Plan of this institution extends its provisions beyond those usually included in pension systems.

Inquiries made at different times lead us to believe that in many instances there is a tendency upon the part of individuals to neglect to give due heed to threatened illness and that, owing to lack of facilities, proper care is not given to the sick. In view of these facts and the number of recent serious cases in which major operations have been required, and also of the fact that at the present time there exist among various employees and members of their families physical ailments that make immediate attention imperative, it has been suggested that it might be desirable to enter into working relations, by endowment or otherwise, with some centrally located hospital in order that proper treatment may be given, especially to those employees and members of their families who are unable to bear the cost of expert care, the applications for assignments to such hospital to be under the control of the Pension Board.

During the past year, through the generosity of friends, the Pension Board has been able to continue to extend relief to the families of deceased subscribers; it has obtained employment for worthy members of such families; secured medical advice, and had minor operations performed upon individuals unable to provide the means for such necessary treatment. Mention of these facts is made only for the purpose of calling attention to the scope of the work of the Pension Board, the humanitarian provisions incorporated in the Rules and Regulations and the highly commendable efforts on the part of the administrative officers of the institution to endeavor in all possible ways not alone to promote the general welfare of its employees

but also to aid those in distress, extending this alleviation even where the relationship of employer and employee has ceased.

At this time we would express our appreciation to those friends who have responded, from time to time, to our solicitations for funds, medical treatment, etc., which have enabled the Pension Board to carry out this portion of the work without impairment of its General Fund Account.

We now have 235 contributing subscribers and one retired employee. During the fiscal year, 17 employees who were subscribers resigned or were dismissed from the service, and 30 new employees, together with one employee who attained his majority, were accepted as subscribers. One petition for a pension was denied. In connection with this last case, however, it must be stated that the Pension Board was powerless to grant the request, as it was found, to the applicant's entire satisfaction, that the circumstances under which the request for pension was filed did not exist. The Pension Board has recommended the re-employment of this applicant.

The following tables show the ages of subscribers (1), and their terms of service (2), at their anniversary date during the current year.

(1)

No. of subscribers between the ages of 18 yrs. and 25 yrs..21										
"	"	"	"	"	"	"	"	"	30 "	.25
"	"	"	"	"	"	"	"	"	35 "	.26
"	"	"	"	"	"	"	"	"	40 "	.43
"	"	"	"	"	"	"	"	"	45 "	.31
"	"	"	"	"	"	"	"	"	50 "	.27
"	"	"	"	"	"	"	"	"	55 "	.18
"	"	"	"	"	"	"	"	"	60 "	.20
"	"	"	"	"	"	"	"	"	65 "	.9
"	"	"	"	"	"	"	"	"	70 "	.11
"	"	"	"	"	"	"	"	"	75 "	.3
"	"	"	"	"	"	"	"	"	80 "	.1

(2)

No. of subscribers in the service	1 yr.	to	5 yrs.....	80
" "	" "	" "	5 yrs. " 10 "	70
" "	" "	" "	10 " " 15 "	36
" "	" "	" "	15 " " 20 "	33
" "	" "	" "	20 " " 25 "	12
" "	" "	" "	25 " " 30 "	2
" "	" "	" "	30 " " 35 "	1
" "	" "	" "	35 " " 40 "	1

We are especially indebted to Mr. S. Herbert Wolfe for his services in making an examination of the operations of the Pension Fund. Mr. Wolfe, in a recent letter, makes the following comments: * * * "I am pleased to be able to advise you that its condition [the Pension Fund] appears to be excellent. The mortality experienced is well within the expected mortality upon which the Fund was predicated, and the manner in which its funds have been invested has produced an interest revenue considerably in excess of that assumed in its calculations."

We are also profoundly grateful to Mr. Lewis L. Delafield for the legal advice and counsel which he has at various times given the Pension Board.

Deceased Subscribers

IGNAZ MATAUSCH

Ignaz Matausch was born on September 1, 1859, in Budweis, Austria. During his early manhood he was employed in constructing models for the private museum of Duke Schwarzenberg. Eleven years ago he entered the service of the Museum as a preparator in the Department of Invertebrate Zoölogy. As an entomologist Mr. Matausch made interesting investigations on the life history of the Membracidae, or Leaf Hoppers, and published several papers concerning this group of insects. His greatest achievement was along lines of modeling. He possessed a remarkable faculty for close observation and imitation, a keen eye for detail and a sensitive appreciation for color and form. Particularly interesting are the enlarged insect models which he prepared for the Department of Public Health. He died on December 14, 1915.

FREDERIC SEYFERT

Frederic Seyfert was born on October 17, 1867, in Rendsburg, Germany. He entered the service of the Museum in 1908 and was assigned to the custodian's force. The efficient manner in which he performed his work always met with the approval of the officials of the Museum. He was possessed of a most happy disposition and his genial cordiality readily won for him a hearty welcome among his fellow workers. These attributes form pleasant memories of an amiable man and a loyal employee. He died on October 22, 1915.

RETIREMENTS

Name.	Former Position.	Date Effective.	Period of Service.
Francis McGuire . . .	Asst. Engineer . .	March 1, 1914 . .	15 yrs.

STATUS OF MEMBERSHIP

Number of Subscribers January 1, 1915.....	223
New Subscribers.....	31
<hr/>	<hr/>
Resignations	11
Dismissals	6
Deaths.....	2
<hr/>	<hr/>
Number of Subscribers December 31, 1915.....	235

FINANCIAL STATEMENT

INVESTED FUNDS

Endowment Fund.....	\$1,127.74
Investment Fund.....	<u>38,872.26</u> \$40,000.00

LIST OF SECURITIES OF THE PENSION FUND

\$5,000—Southern Pacific Co. 4½% Equipment Bonds. Due 1923.
5,000—Union Pacific R. R. Co. 4% 1st Lien and Refunding Mtg. Bonds. Due 2008.
5,000—Chicago & Northwestern Ry. Co. 4% Genl. Mtg. Bonds. Due 1987.
5,000—Delaware & Hudson Co. 4½% 1st Lien Equipment Bonds. Due 1922.
5,000—Illinois Central R. R. Co. and Chicago, St. Louis & New Orleans R. R. Co. 5% Joint 1st and Refunding Mtg. Bonds. Due 1963.
5,000—Pennsylvania R. R. Co. 4½% Genl. Mtg. Bonds. Due 1965.
5,000—Pennsylvania Co. 4½% Gold Loan Bonds (Temporary Cts.) Due 1921.
5,000—Baltimore & Ohio R. R. Co. 5% Refunding Mtg. Bonds. Due 1995.

PENSION BOARD OF THE AMERICAN MUSEUM OF NATURAL HISTORY

PENSION FUND ACCOUNT

RECEIPTS.

1915

CASH ON HAND JANUARY 1, 1915..... \$9,079.25

CONTRIBUTIONS OF SUBSCRIBING EMPLOYEES:

DEDUCTIONS OF 3% FROM PAYROLLS OF	
CITY MAINTENANCE ACCOUNT.....	\$4,937.72
GENERAL ACCOUNT.....	3,033.69
SPECIAL FUNDS ACCOUNT.....	64.84
CORPORATE STOCK ACCOUNT.....	4.56
INCIDENTAL ACCOUNT.....	35.59
	\$8,076.40

PERSONAL CONTRIBUTIONS OF SUBSCRIBING
EMPLOYEES 214.21 8,290.61

CONTRIBUTIONS OF BOARD OF TRUSTEES

TO EQUAL CONTRIBUTIONS OF SUBSCRIBING EMPLOYEES	8,290.61
INTEREST ON INVESTMENT FUND.....	1,150.78
INTEREST ON ENDOWMENT FUND.....	50.74
INTEREST ON CREDIT BALANCES.....	187.92
BURSAR'S ACCOUNT.....	500.00
	\$27,549.91

Examined and $\left\{ \begin{array}{l} \text{ADRIAN ISELIN, JR.} \\ \text{PERCY R. PYNE} \end{array} \right\}$ *Auditing Committee*
Approved

in account with CHARLES LANIER, TREASURER

PENSION FUND ACCOUNT

DISBURSEMENTS

1915

RETURN OF CONTRIBUTIONS.....	\$575.36
INTEREST ON CONTRIBUTIONS RETURNED.....	15.87
SERVICE PENSION.....	277.50
DEATH GRATUITIES PAID UNDER SECTION 13..	918.90
<hr/>	
PURCHASE OF SECURITIES:	
INVESTMENT FUND.....	19,863.19
EXPENSES.....	58.57
LOAN ACCOUNT.....	500.00
<hr/>	
CASH ON HAND DECEMBER 31, 1915:	
DEPOSITED WITH U. S. TRUST CO. OF N. Y....	\$4,840.52
DEPOSITED WITH COLONIAL BANK (BURSAR'S ACCOUNT)	500.00
	<hr/>
	\$27,549.91

CHARLES LANIER, *Treasurer*

E. & O. E.

NEW YORK, December 31, 1915

PENSION BOARD OF THE AMERICAN MUSEUM OF NATURAL HISTORY

PENSION FUND--SPECIAL FUNDS ACCOUNT

RECEIPTS.

1915

SPECIAL CONTRIBUTIONS No. 1:

CASH ON HAND JANUARY 1, 1915..... \$50.00

SPECIAL CONTRIBUTIONS No. 2:

CLEVELAND H. DODGE.....	\$25.00
ADRIAN ISELIN, JR.....	30.00
ARTHUR CURTISS JAMES.....	15.00
A. D. JUILLIARD.....	15.00
CHARLES LANIER.....	15.00
OGDEN MILLS.....	15.00
J. P. MORGAN.....	15.00
HENRY FAIRFIELD OSBORN.....	15.00
FELIX M. WARBURG.....	25.00
	170.00

INTEREST ON CR. BALANCES:

EARNINGS TO DECEMBER 31, 1915.....	10.60
	\$230.60

Examined and $\left\{ \begin{matrix} \text{ADRIAN ISELIN, JR.} \\ \text{PERCY R. PYNE} \end{matrix} \right\}$ *Auditing Committee*
Approved

PENSION FUND—SPECIAL FUNDS ACCOUNT

DISBURSEMENTS

1915

SPECIAL CONTRIBUTIONS No. 1:

PAYMENT FOR RELIEF..... \$50.00

SPECIAL CONTRIBUTIONS No. 2:

PAYMENT FOR RELIEF..... 150.00
..... \$200.00

CASH ON HAND DECEMBER 31, 1915:

DEPOSITED WITH U. S. TRUST CO. OF N. Y..... 30.60
..... \$230.60

CHARLES LANIER, *Treasurer*

E. & O. E.

NEW YORK, December 31, 1915

FOURTH ANNUAL REPORT
OF THE
PENSION BOARD
OF
THE AMERICAN MUSEUM
OF NATURAL HISTORY

FOR THE YEAR 1916

MISCELLANEOUS PUBLICATIONS OF
THE AMERICAN MUSEUM OF NATURAL HISTORY, NO. 8

NEW YORK
February 1, 1917

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February 1, 1917

OFFICERS AND MEMBERS OF PENSION BOARD

1916

<i>Chairman</i> FELIX M. WARBURG	<i>Vice-Chairman</i> RALPH W. TOWER
<i>Treasurer</i> HENRY P. DAVISON	<i>Secretary</i> GEORGE N. PINDAR

TRUSTEE MEMBERS

ADRIAN ISELIN, JR.	PERCY R. PYNE
WALTER B. JAMES	FELIX M. WARBURG

EMPLOYEE MEMBERS

HARRY F. BEERS	RALPH W. TOWER
GEORGE N. PINDAR	

<i>Bursar</i> FREDERICK H. SMYTH	<i>Counsel</i> LEWIS L. DELAFIELD
<i>Consulting Actuary</i> S. HERBERT WOLFE	<i>Medical Examiner</i> GEORGE M. MACKENZIE, M.D.

*To the President and Trustees of the American Museum of
Natural History and to the Subscribers to the Pension Fund:*

I have the honor to transmit to you herewith the Fourth Annual Report of the activities of the Pension Board and on its financial operations for the fiscal year terminating December 31, 1916.

FELIX M. WARBURG

Chairman

February 1, 1917

It has been thought desirable to preface the report of the Pension Board by briefly recording the most essential changes which have been made in the Rules and Regulations of the Pension Fund and also the measures for safeguarding, in every way possible, its investments.

So many changes are occurring in the personnel of the employees of the Museum, as well as among the participants in the Pension Plan, that it has been found desirable and necessary to institute a system of physical examination for the new entrants. Upon recommendation of this Board, the Trustees of the Corporation amended the Rules and Regulations so as to provide that no employee of the Museum can become a subscriber without having first passed a satisfactory physical examination. That the insertion of this provision was justifiable and wise is best demonstrated, not alone by the rejection of certain applicants, but by having the attention of others personally called to minor physical defects and ailments, and which, in the majority of cases, have readily responded to treatment.

Early in the year the Chairman notified the members of the Pension Board that certain of its securities were not legal investments for Savings Banks, etc., according to the laws of the State of New York, and thereupon, in accordance with the resolution adopted by the Trustees of the Museum, the Pension Board sold such bonds and invested the proceeds thereof in securities which had been declared to be legal investments. A list of the securities now held is incorporated in the financial statement of this report.

It is with deep regret that we are obliged to report the death of four of our subscribers, who have been in the service of the Museum for periods ranging from seven to eighteen years, particular mention concerning whom will be found in another part of this report.

At the time of the adoption of the present Rules and Regulations, in 1913, the Trustees of the Corporation had the assistance of Mr. S. Herbert Wolfe as consulting actuary. Mr. Wolfe since that time has taken an active interest in the wel-

fare of the Plan and has submitted for consideration an interesting report of the condition of our Fund based upon his observations, from which we quote as follows:

"Your pension fund has been in existence nearly four years—having been started in March, 1913—and it will be interesting, therefore, to present a statistical review of this initial period.

The following statement of the receipts and disbursements of the fund by calendar years will enable you to judge of its growth:

TABLE I

RECEIPTS FROM ALL SOURCES

	1913	1914	1915	1916	Total Dec. 31, 1916
Deductions of 3% from pay-rolls of City					
Maintenance Account	\$4,100 14	\$4,888 66	\$4,937 72	\$4,897 75	\$18,824 27
General Account	1,980 21	2,448 08	3,033 69	3,612 92	11,074 90
Special Funds Account	26 58	81 20	64 84	110 63	283 25
Corporate Stock Account	98 06	367 47	4 56	121 16	591 25
Incidental Account	31 70	48 31	35 59	72	116 32
Crocker Land Expedition	25 94	07			26 01
Personal contributions from subscribing employees	203 09	170 27	214 21	198 88	786 45
Interest on deferred contributions		1 60			1 60
	\$6,465 72	\$8,005 66	\$8,290 61	\$8,942 06	\$31,704 05
Contributions of Board of Trustees to equal contributions of subscribing employees					
Interest on Credit Balances	6,465 72	8,005 66	8,290 61	8,942 06	31,704 05
Interest on Endowment Fund	115 09	201 00	187 92	180 77	684 78
Interest on Investment Fund		50 74	50 74	67 43	168 91
Interest on leave of absence payments.	340 37	1,150 78	1,817 58	3,308 73	
Interest on repayment of contributions and interest			17		17
Return of contributions			87		87
Interest on contributions returned		68 78			68 78
Interest on deferred contributions			79		79
			3 08		3 08
Investment Fund	\$13,046 53	\$16,674 04	\$17,970 66	\$19,952 98	\$67,644 21
Endowment Fund	1,083 27	27 50		19,075 99	19,075 99
	\$14,129 80	\$16,701 54	\$17,970 66	\$40,169 37	\$88,971 37

PENSION FUND—SPECIAL FUNDS ACCOUNT

RECEIPTS

Cleveland H. Dodge	\$25 00	\$25 00		
Adrian Iselin, Jr.	25 00	30 00		
Arthur Curtiss James	25 00	15 00		
A. D. Juilliard	25 00	15 00		
J. P. Morgan	25 00	15 00		
Henry Fairfield Osborn	25 00	15 00		
Felix M. Warburg	50 00	25 00		
Charles Lanier		15 00		
Ogden Mills		15 00		
Interest on Credit Balances		10 60		
			77	
	\$200 00	\$180 60	\$ 77	\$381 37

DISBURSEMENTS

	1913	1914	1915	1916	Total Dec. 31, 1916
Return of contributions	\$189 94	\$607 39	\$575 36	\$963 77	\$2,336 46
Interest on contributions returned	96	11 95	15 87	28 65	57 43
	<u>\$190 90</u>	<u>\$619 34</u>	<u>\$591 23</u>	<u>\$992 42</u>	<u>\$2,393 89</u>
Service pension		\$231 25	\$277 50	\$277 50	\$786 25
Death gratuities paid under Section 13 .		1,574 00	918 90	1,696 57	4,189 47
		<u>\$1,805 25</u>	<u>\$1,196 40</u>	<u>\$1,974 07</u>	<u>\$4,975 72</u>
Expenses			\$58 57	\$43 57	\$102 14
Total disbursements for Pension Fund .	\$190 90	\$2,424 59	\$1,846 20	\$3,010 06	\$7,471 75
Purchase Securities:					
Endowment Fund	\$1,083 27			\$1,140 40	\$2,223 67
Investment Fund	3,747 08	14,306 25	19,863 19	36,256 77	74,173 29
	<u>\$4,830 35</u>	<u>\$14,306 25</u>	<u>\$19,863 19</u>	<u>\$37,397 17</u>	<u>\$76,396 96</u>
Grand total	\$5,021 25	\$16,730 84	\$21,709 39	\$40,407 23	\$83,868 71
Cash on hand Dec. 31, 1916					5,102 66
					<u>\$88,971 37</u>

PENSION FUND—SPECIAL FUNDS ACCOUNT

DISBURSEMENTS

Special Contribution No. 1	\$150 00	\$50 00	\$200 00
Special Contribution No. 2		150 00	150 00
	<u>\$150 00</u>	<u>\$200 00</u>	<u>\$350 00</u>
Cash on hand Dec. 31, 1916			31 37
			<u>\$381 37</u>

The above figures were furnished to me by the Bursar of the Pension Fund, who also made the following statement of the condition of the fund on December 31st, 1916:

Book value of securities held	\$56,688 95
Cash on hand	5,102 66
Cash in Special Funds Account	31 37
	<u>\$61,822 98</u>

The number of contributing members to the fund varied but slightly from year to year, and on December 31st, 1916, the number contributing was practically the same as at the time that the fund started:

TABLE II
NUMBER OF CONTRIBUTING MEMBERS

March 1, 1913	239
December 31, 1913	216
December 31, 1914	223
December 31, 1915	235
December 31, 1916	241

The accessions and departures were due to the following causes:

Contributing members at inauguration of fund	239
New contributors since that time	97
	<hr/>
	336
Resignations	84
Deaths	10
Retired on pension	1
	<hr/>
Contributing members Dec. 31, 1916	241

The 241 contributors arranged by attained ages on December 31st, 1916, are shown in the following table:

TABLE III

Age	No. Sub.	Age	No. Sub.	Age	No. Sub.	Age	No. Sub.
19	1	32	6	45	4	58	1
20	2	33	6	46	9	59	4
21	3	34	6	47	8	61	3
22	7	35	5	48	5	62	2
23	6	36	6	49	3	63	2
24	4	37	8	50	3	64	3
25	8	38	8	51	7	65	2
26	6	39	7	52	2	66	3
27	5	40	6	53	4	67	4
28	4	41	8	54	3	68	3
29	7	42	9	55	2	70	1
30	3	43	8	56	2	72	3
31	4	44	7	57	7	78	1
Total							

The ages of the 97 new contributors are as follows:

TABLE IV

Age at Admission	1913	1914	1915	1916
18		I		I
19			I	I
20		I		
21		6	3	7
22	I	I	2	3
23		5	I	4
24		2	2	2
25			2	
26		3	3	
27		3		I
28		2	I	2
29		I		
30			2	
31			I	3
32			2	
33			I	I
34		I	2	I
35			I	I
36		I	2	2
37		I		I
38			I	
40		I	I	I
41		I		
42		I	I	
44				I
45		I		
46		I		
47			I	
48		I		

The corresponding table for the resignations is as follows:

TABLE V

Age at Resignation	1913	1914	1915	1916
19	I	I		
21	I	2	3	
22	I	3	I	
23	I			4
24	3		2	I
25	I			
26		2	2	I
27		I		I
28	I	2	I	2
29	2	2		2
30	I	I	I	
31	I			2
32	I			
33		I		I
34	2		I	3
35			I	
36				2
37	I			I
38	I	I	I	
39	I			
40		I		
41		I		
43				I
44	I			
45	I	I		
50				I
52	I			
55		I		
56	I			
57		I		
59		I		
61	I		I	
62			I	
67			I	

The significance of the foregoing tables lies in the fact that the average age of the new entrants is 28, while the average age of those who have resigned is 32. In other words, the condition of the fund has been materially improved by a reduction of the average age of over one-third of the total membership. The fact that some of the retirements took place among those who had entered the fund since its inauguration may affect the correctness of this statement slightly, but to all intents and purposes the change has affected about one-third of the initial membership.

There have been ten deaths among the contributors, their ages and length of service at time of decease being as follows:

TABLE VI

DEATHS DURING 1914

Member	Age at Death	Length of Service
I	31	3 yrs.
I	40	13 "
I	51	12 "
I	58	15 "

DEATHS DURING 1915

Member	Age at Death	Length of Service
I	48	7 yrs.
I	56	11 "

DEATHS DURING 1916

Member	Age at Death	Length of Service
I	40	12 yrs.
I	53	18 "
I	63	15 "
I	66	7 "

But one contributing member has been placed on the pension rolls, and it is a matter of interest to note that his retirement was not voluntary, but was made necessary by the condition of his health, which in the opinion of your Board indicated the advisability of his availing himself of the right to the pension after 15 years of service. This retirement took place in 1914, and the present age of the pensioner is 79.

The foregoing statistics are interesting and when examined from year to year will enable you to judge of the condition of your fund.

It may not be amiss for me at this time to point out certain facts in connection with your fund specifically and staff pension funds generally.

I venture to say that there is no form of benefits granted to municipal employees or private and public corporations about which so much uncertainty exists as among pension funds. The statement has been made that the number of such funds which are on a financially sound basis is practically negligible, and, while I am not prepared to subscribe to that statement in its entirety, I feel that it is correct to all intents and purposes. The New York City Teachers Retirement Fund and the Carnegie Pension Fund are recent examples of the instability of plans involving a large number of beneficiaries.

When I passed upon your plan early in 1913 I realized that there were peculiar conditions surrounding your employees which made it impossible to apply the data which had been used in the formation of a number of other funds. Many of your employees are connected with the scientific development of your institution, and the pride which they take in their work justifies us in assuming that there will be a deviation from the principles applicable to commercial annuity or pension plans; that this faith has been justified is indicated by a statement of the age and service record of your present contributors. The retirement of those more advanced in age and the taking of their places by employees of younger ages were other factors which led me to advise you that it would be unnecessary to establish a large initial fund to take care of what are sometimes termed 'accrued liabilities.' I felt that we would be justified in first determining whether the peculiar conditions

surrounding your employees would obviate the necessity for the creation of such initial fund based upon assumptions which would not be applicable to the problem which confronted us. I stated that if the time arrived when a change in your method became necessary, I would advise you and steps could then be taken to provide the necessary safeguards based upon data derived from your own actual experience. I am happy to state that the condition of your fund is such as to indicate the necessity for no change at the present time."

Deceased Subscribers

It is with deep regret that we record the deaths of the following subscribers during the year 1916:

CHARLES FALKENBACH

Charles Falkenbach was born on July 28, 1876, in Philadelphia. Nearly thirteen years ago he became attached to the laboratory staff in the Department of Vertebrate Paleontology and soon became one of the most skilful preparators in the Museum. His accuracy in the detail of the restoration of fragile specimens and his inventiveness in devising means of preparing them for exhibition are especially deserving of credit and commendation. The numerous specimens of ancient fossil reptiles prepared by him during his long service with the institution will stand as monuments to his genius and aptitude. In his death the Museum has lost an industrious and conscientious employee, and his personal associates a valued friend and co-worker. He died on March 3, 1916.

CATHERINE HAWLEY

Catherine Hawley was born in Ireland on May 23, 1863. Over eighteen years ago she became a matron in the Museum. Possessed of a keen sense of humor, a most kindly disposition, and a willingness to assist those in distress, she early endeared herself to her associates and to the large body of employees in the Museum. The last years of her life were filled with physical pain and suffering, which she bore with a fortitude consistent with the Christian life which she lived. She died September 9, 1916.

LAWRENCE McKEON

Lawrence McKeon was born in Ireland, January 23, 1850. He entered the service of the Museum seven years ago and was assigned to the construction department, where he devoted his time principally to the operation of the wood-working machinery. Always of a happy disposition, his cordiality won for him a welcome in the gatherings of his associates, and his skilful workmanship merited the frequent approval of the heads of his department. He died on April 21, 1916.

MICHAEL J. MILES

Michael J. Miles was born on July 12, 1853, in Newburgh, New York. He came to the Museum over fifteen years ago, where he was employed at his trade of carpentry. He was steadfast in friendship and faithfully and conscientiously performed the duties to which he was assigned. Although he suffered from physical ills for a protracted period, he bore them without complaint and without the knowledge of most of his associates, in whose memory will linger pleasant recollections of this agreeable man and fellow worker. He died on September 22, 1916.

RETIREMENTS

Name.	Position.	Date Effective.	Period of Service.
Francis McGuire	Asst. Engineer	March 1, 1914	15 yrs.

FINANCIAL STATEMENT

1916

INVESTED FUNDS

	Par Value	Book Value
ENDOWMENT FUND	\$1,258 37	\$1,140 39
INVESTMENT FUND	58,741 63	55,548 36
TOTAL	\$60,000 00	\$56,688 75

STATEMENT OF INVESTED FUNDS

Par Value	Securities	Due	Rate of Int.	Interest Payable	Ann. Int.	Date Acquired	Book Value
\$5,000 00	Union Pacific Railroad Company, 1st Lien & Refunding Mortgage Bonds	2008	4% Mar.-Sept.	\$200	Feb. 26, 1914	\$4,687 50	
5,000 00	Chicago & Northwestern Railway Company, General Mortgage Bonds	1987	4% May-Nov.	200	July 7, 1914	4,725 00	
5,000 00	Pennsylvania Railroad Company, General Mortgage Bonds	1965	4½% June-Dec.	225	June 4, 1915	4,887 50	
5,000 00	Baltimore & Ohio Railroad Co., Refunding & General Mortgage Bonds	1995	5% June-Dec.	250	Dec. 29, 1915	5,050 00	
5,000 00	Chicago, Milwaukee, St. Paul Company, General & Refunding Mortgage Bonds	2014	4½% Apr.-Oct.	225	May 5, 1916	4,668 75	
5,000 00	Atchison, Topeka & Santa Fe Railway Company, General Mortgage Bonds	1995	4% Apr.-Oct.	200	May 29, 1916	4,687 50	
5,000 00	Norfolk & Western Railway, First Consol. Mortgage Bonds	1996	4% Apr.-Oct.	200	May 29, 1916	4,681 25	
5,000 00	New York Central Railroad Co., Refunding & Improvement Bonds	2013	4½% Apr.-Oct.	225	May 29, 1916	4,706 25	
5,000 00	Southern Pacific Railroad Co., First Refunding Mortgage Bonds	1955	4% Jan.-July	200	May 29, 1916	4,533 75	
5,000 00	Northern Pacific Railway Co., Refunding & Improvement Mortgage Bonds	2047	4½% Jan.-July	225	July 17, 1916	4,825 00	
5,000 00	Illinois Central Railroad Co., Refunding Mortgage Bonds	1955	4% May-Nov.	200	Oct. 18, 1916	4,518 75	
5,000 00	Chicago, Burlington & Quincy R. R. Company, General Mortgage Bonds	1958	4% Mar.-Sept.	200	Dec. 30, 1916	4,717 50	
<hr/>							\$2,550
<hr/>							\$60,000 00
<hr/>							\$56,688 75

PENSION BOARD OF THE AMERICAN MUSEUM OF NATURAL HISTORY

PENSION FUND ACCOUNT

RECEIPTS

1916

CASH ON HAND JANUARY 1, 1916 \$5,340 52

CONTRIBUTIONS OF SUBSCRIBING EMPLOYEES:

Deductions of 3% from Payrolls of		
City Maintenance Account	\$4,897 75	
General Account	3,612 92	
Special Funds Account	110 63	
Corporate Stock Account	121 16	
Incidental Account	72	
		\$8,743 18
PERSONAL CONTRIBUTIONS OF SUBSCRIBING EMPLOYEES	198 88	
		8,942 06
CONTRIBUTIONS OF BOARD OF TRUSTEES:		
To Equal Contributions of Subscribing Employees	8,942 06	
INTEREST ON DEFERRED CONTRIBUTIONS	3 08	
INTEREST ON INVESTMENT FUND	1,817 58	
INTEREST ON ENDOWMENT FUND	67 43	
INTEREST ON CREDIT BALANCES	180 77	
INVESTMENT FUND:		
Proceeds of Sale of Bonds	19,075 99	
ENDOWMENT FUND:		
Proceeds of Sale of Bonds	1,140 40	
BURSAR'S ACCOUNT	500 00	
		\$46,009 89

Examined { ADRIAN ISELIN, JR. } *Auditing*
and Approved { PERCY R. PYNE } *Committee*

PENSION FUND—SPECIAL FUNDS ACCOUNT

RECEIPTS

1916

SPECIAL CONTRIBUTIONS No. 2:

Cash on Hand January 1, 1916	\$20 00
INTEREST ON CREDIT BALANCES:	
Earnings to December 31, 1916	11 37
	\$31 37

Examined { ADRIAN ISELIN, JR. } *Auditing*
and Approved { PERCY R. PYNE } *Committee*

PENSION FUND ACCOUNT

DISBURSEMENTS

1916

RETURN OF CONTRIBUTIONS	\$963 77
INTEREST ON CONTRIBUTIONS RETURNED	28 65
	<hr/>
SERVICE PENSION	277 50
DEATH GRATUITIES PAID UNDER SECTION 13	1,696 57
	<hr/>
	1,974 07

PURCHASE OF SECURITIES:

Investment Fund	36,256 77
Endowment Fund	1,140 40
	<hr/>
	37,397 17
EXPENSES	43 57
LOAN ACCOUNT	500 00

CASH ON HAND DECEMBER 31, 1916:

Deposited with the United States Trust Company of New York	4,602 66
Deposited with Colonial Bank (Bursar's Account)	500 00
	<hr/>
	5,102 66
	<hr/>
	\$46,009 89

E. & O. E.

NEW YORK, December 31, 1916

HENRY P. DAVISON, Treasurer

PENSION FUND—SPECIAL FUNDS ACCOUNT

DISBURSEMENTS

1916

CASH ON HAND DECEMBER 31, 1916:

Deposited with the United States Trust Co. of New York	\$31 37
	<hr/>
	\$31 37

E. & O. E.

NEW YORK, December 31, 1916

HENRY P. DAVISON, Treasurer

FIFTH ANNUAL REPORT
OF THE
PENSION BOARD
OF
THE AMERICAN MUSEUM
OF NATURAL HISTORY

FOR THE YEAR 1917

MISCELLANEOUS PUBLICATIONS OF
THE AMERICAN MUSEUM OF NATURAL HISTORY, NO. 9

NEW YORK
February 1, 1918

FIFTH ANNUAL REPORT
OF THE
PENSION BOARD
OF
THE AMERICAN MUSEUM
OF NATURAL HISTORY

FOR THE YEAR 1917

MISCELLANEOUS PUBLICATIONS OF
THE AMERICAN MUSEUM OF NATURAL HISTORY, NO. 9

NEW YORK
February 1, 1918

OFFICERS AND MEMBERS OF PENSION BOARD

1917

Chairman

FELIX M. WARBURG

Vice-Chairman

RALPH W. TOWER

Treasurer

HENRY P. DAVISON

Secretary

GEORGE N. PINDAR

TRUSTEE MEMBERS

ADRIAN ISELIN

PERCY R. PYNE

WALTER B. JAMES

FELIX M. WARBURG

EMPLOYEE MEMBERS

HARRY F. BEERS

RALPH W. TOWER

GEORGE N. PINDAR

Bursar

FREDERICK H. SMYTH

Counsel

LEWIS L. DELAFIELD

Consulting Actuary

S. HERBERT WOLFE

Medical Examiners

GEORGE M. MACKENZIE, M.D.

WALTER P. ANDERTON, M.D.

*To the President and Trustees of The American Museum of
Natural History and to the Subscribers to the Fund:*

In accordance with the Rules and Regulations, I have the honor to present herewith the Fifth Annual Report of the activities of the Pension Board and of its financial operations for the fiscal year ending December 31, 1917.

FELIX M. WARBURG
Chairman

February 1, 1918

Since the organization of the Pension Plan, it has been the custom for the Director of the Museum to certify to the Pension Board as permanent the names of those employees whose services were to be retained. More recently, as it was found best to adopt a system of physical examination, a change of procedure in methods of certification was necessitated, inasmuch as occasionally certifications of permanent employment had to be cancelled, in the cases of employees who were found to be physically unsuited, from an insurance standpoint, to participate in the Pension Plan. Remedial changes have therefore been effected, so that now the Director indicates his willingness to certify temporary employees as permanent in their relation to the institution, providing they first pass the physical examination required by the Board. At the satisfactory completion of this physical examination, the employee is certified as permanent. This simplification obviates the necessity of cancelling any permanency certification once given.

The following is the status of the membership of the Fund as constituted December 31, 1917:

Number of Subscribers, January 1, 1917	241
New Subscribers during the year 1917	34
Reinstatements made during the year 1917	2
<hr/>	
	277
Resignations and Dismissals	15
Retirements	2
Deaths	4 21
<hr/>	
Number of Subscribers, December 31, 1917	256

During the year we have had the misfortune to lose by death four members, as noted above, particular mention of whom will be found in another part of the report, as will also the names of those members who have retired from active service.

As in previous years, it is a pleasure to record that through the good offices of friends of the institution, employment has

been found for members of certain deserving families of deceased subscribers, supervising medical attention provided for those who have been ill, and other forms of relief afforded.

Serious thought and discussion have been given to the desirability of obtaining an endowed bed under the control of this Board, in some hospital of the city, but after careful consideration it was felt best to solicit from friends of the Museum the privilege of nominating occupants to beds already endowed, so as to offer to employees a choice of hospitals. Our endeavor in this direction has already proved successful, and we desire to record here our sincere appreciation to those friends who have so kindly placed at the disposition of the Secretary endowed beds in two of the prominent hospitals of the city, for occupancy by employees in need of surgical attention and medical care. We take this opportunity to notify the employees that, should it become necessary for any of them to undergo hospital treatment, a notification to the Secretary to that effect will secure for them, barring prior claims, free attendance at Mount Sinai or the Presbyterian Hospital. Should preference be expressed for treatment in other hospitals, attempts will be made to conclude similar arrangements for beds in hospitals chosen by employees.

In early June, the President, with forethought and a keen appreciation of the benefit which would accrue to employees from participating in the Liberty Loans, appointed a committee consisting of the Chairman, Mr. Iselin, the Bursar, and the Secretary, to formulate a plan whereby the employees generally might be given the opportunity of subscribing and paying for bonds by some easy payment method. Through the generosity of certain Trustees, who advanced the necessary funds, such a course was made possible, and we desire to express our gratitude not only to those Trustees who formulated and made possible such an operative plan, but as well to the Bursar of the Fund, Mr. Smyth, who has given his time and painstaking efforts to secure subscriptions and to prepare and keep such books as are necessary in carrying on this work. That the plan was successful is best evidenced by the fact that 164 subscriptions, in the amount of \$13,150.00, were received to the first issue of bonds, and 95 subscriptions, amounting to \$9,100.00, were received to the second issue of bonds.

Although the report of the Pension Board is confined in the main to a statement of the current business of the Board, it has been thought well to include a brief description of the activities of those of our associated officers and members who, through a deep sense of patriotic duty, have enlisted or otherwise volunteered their services to our country.

Early in the year, Dr. George M. Mackenzie, who had been acting for some time as medical examiner for the Pension Board, found it necessary temporarily to sever his relations with the Board, owing to the acceptance of his offer to serve as a medical examiner for the Naval Reserve Force. He is now located at the Brooklyn Navy Yard, and in his stead Dr. Walter P. Anderton, who has for a long time been attached to the Presbyterian Hospital, has been selected, and is giving to the Board most efficient and satisfactory service.

The patriotic activities of our Consulting Actuary, Mr. S. Herbert Wolfe, have been varied and considerable. Early in May, at the instigation of the United States Department of Labor, he visited Canada for the purpose of ascertaining the care given by that country to the dependents of enlisted men. The results of his work there have been incorporated in a report issued by the Department. After the satisfactory completion of this duty, Mr. Wolfe received an appointment as Captain in the Quartermaster's Department. He was detailed to Washington, where he assisted in drafting the present measure for soldiers' insurance and compensation in the United States, and while thus occupied directed the compilation of a report entitled "Governmental Provisions in the United States and Foreign Countries for Members of the Military Forces and Their Dependents." This report includes a review of the pension situation in the United States, a brief analysis of provisions peculiar to foreign countries and comparative charts of rates in the United States and twelve other countries, and is amplified by an exhaustive report of the Pension systems of the United States and of all the foreign countries except Canada. Having completed this task, Captain Wolfe was sent abroad, and is at present located in France. Through the intermedium of his office, however, Captain Wolfe is continuing his services as Consulting Actuary to the Pension Board.

A number of our members have been prompt in offering

themselves for active service to our country. Some of these have entered the Federal Service from the National Guard; some, including a number of graduates of the Plattsburg camps, have enrolled in various branches of the Army, and others have entered the Navy. Of all we can attest that they are fulfilling man's highest duty and privilege in giving their aid, their personalities, their influence, and their lives, if need be, in the cause of liberty, humanity and justice. Great indeed is our debt to those of our members who have responded to their country's call, and it is with a deep sense of appreciation that we enumerate those members at this time on our Roll of Honor:

HAROLD E. ANTHONY
FELIX A. BARBARITO
JAMES P. CHAPIN
CHARLES A. CONNOLLY
JOSEPH F. CONNOLLY
LAURENCE FERRI
JOHN J. FINN
ALBERT J. KELLY
DANIEL J. MCGARTY
JOSEPH S. MCGARTY
EDWIN C. MEYENBERG
LEO E. MILLER
BARRINGTON MOORE

Deceased Subscribers

It is with deep regret that we record the deaths of the following members during the year 1917:

LOUIS POPE GRATACAP

Louis Pope Gratacap was born November 1, 1851, in Brooklyn. He attended the public schools, and graduated from the College of the City of New York in 1869 with the degree of Bachelor of Arts, and from the Columbia School of Mines in 1876 with the degree of Bachelor of Philosophy. In 1880 he received the degree of Master of Arts from the College of the City of New York. He entered the service of the Museum in 1876, when the collections were housed in the old Arsenal in Central Park. In 1880 he was appointed Assistant Curator of Mineralogy, and in 1883 Assistant Curator of the Department of Geology. In 1900 he was made Curator of Mineralogy, also in charge of Conchology, becoming Curator of Conchology in 1901. In 1909 he received the appointment of Curator of the division of Mollusca in the Department of Invertebrate Zoölogy, and held this office, together with his curatorship of Mineralogy, until the time of his death. Mr. Gratacap, who was wonderfully versatile, was a fluent speaker and brilliant lecturer, and possessed rare personal charm. His numerous works of fiction bear witness to his remarkable powers of imagination and elegance of literary style. In his knowledge of gems, minerals and shells he was without a peer. Combined with this attainment he possessed the rare faculty

of arranging the specimens under his control so artistically and so revealingly of their beauties of color and splendors of light that layman and scientist alike were attracted and fascinated by the elegance and perfection of the display. His last few years he devoted to the classification and rearrangement of the specimens of Mollusca, having already completed that of the gems and minerals, and this work will stand through the years to come as an enduring monument to his scientific and artistic attainments. Generous of heart, steadfast and warm in friendship, his loss is irremediable. He died on December 19, 1917.

WILLIAM J. HAYES

William J. Hayes was born on November 12, 1868, in this city. He entered the service of the Museum nearly six years ago and was assigned the duties of night-watchman. He was conspicuous for faithfulness in the performance of his duties and the regularity of his attendance. Those who associated with him have a deep sense of personal loss, for in addition to his other attributes he had the faculty of maintaining firm and hearty friendships. He died on April 8, 1917.

FRANCIS S. MCGUIRE

Francis S. McGuire was born on July 5, 1837, in East Troy, New York. On October 24, 1861, he enlisted in the United States Navy, where he served with honor and distinction as gunner's mate on the Barque *Fernandina*, receiving his discharge February 23, 1865. As an evidence of his integrity and the respect in which he was held by his comrades, it may be stated that later he was commander for more than twelve years of William D. Kennedy Post, G.A.R. In 1898 Mr. McGuire entered the employ of the Museum and was assigned to the engineering force, where he faithfully and conscientiously served as night engineer for nearly sixteen years. Age and declining health caused him to ask for his retirement by the Museum in 1914. Mr. McGuire was a most likeable man, of happy disposition, and true in friendship. Seldom complaining through years of continuous illness, he was released from his sufferings on December 15, 1917.

AUGUSTUS R. STRADER

Augustus R. Strader was born May 28, 1848, in Asbury, New Jersey. For a number of years prior to his entering the service of the Museum in 1899, he was employed by contractors engaged in constructing cases and other equipment for this institution. Upon the organization of a Museum construction department, he was placed in charge of the carpentry force, where he not only supervised the work of repairs, but as a draughtsman prepared all the plans for new exhibition cases and for alterations required in the building. This position he held at the time of his death. Possessed of a most agreeable personality, genial and friendly to all, his sudden death was a great shock to his numerous associates, who will ever cherish memories of this sincere friend and enjoyable companion. He died on December 24, 1917.

RETIREMENTS

Name	Position	Date Effective	Period of Service
John T. Davis.....	Carpenter.....	March 1, 1917.....	15 yrs.
John Jordan.....	Attendant.....	April 1, 1917.....	15 yrs.

FINANCIAL STATEMENT

1917

INVESTED FUNDS

	Par Value	Book Value
Endowment Fund	\$1,258 37	\$1,140 39
Investment Fund	74,741 63	69,622 11
Total	\$76,000 00	\$70,762 50

STATEMENT OF INVESTED FUNDS

Par Value	Securities	Due	Rate of Int.	Interest Payable	Ann. Int.	Date Acquired	Book Value
\$5,000 00	Union Pacific Railroad Company, 1st Lien & Refunding Mortgage Bonds	2008	4%	Mar.-Sept.	\$200	Feb. 26, 1914	\$4,687 50
5,000 00	Chicago & Northwestern Railway Company, General Mortgage Bonds	1987	4%	May-Nov.	200	July 7, 1914	4,725 00
5,000 00	Pennsylvania Railroad Company, General Mortgage Bonds	1965	4½%	June-Dec.	225	June 4, 1915	4,887 50
5,000 00	Baltimore & Ohio Railroad Co., Refunding & General Mortgage Bonds	1995	5%	June-Dec.	250	Dec. 29, 1915	5,050 00
5,000 00	Chicago, Milwaukee, St. Paul Railway Company, General & Refunding Mortgage Bonds	2014	4½%	Apr.-Oct.	225	May 5, 1916	4,668 75
5,000 00	Atchison, Topeka & Santa Fe Railway Company, General Mortgage Bonds	1995	4%	Apr.-Oct.	200	May 29, 1916	4,687 50
5,000 00	Norfolk & Western Railway, First Consol. Mortgage Bonds	1996	4%	Apr.-Oct.	200	May 29, 1916	4,681 25
5,000 00	New York Central Railroad Co., Refunding & Improvement Bonds	2013	4½%	Apr.-Oct.	225	May 29, 1916	4,706 25
5,000 00	Southern Pacific Railroad Co., First Refunding Mortgage Bonds	1955	4%	Jan.-July	200	May 29, 1916	4,533 75
5,000 00	Northern Pacific Railway Co., Refunding & Improvement Mortgage Bonds	2047	4½%	Jan.-July	225	July 17, 1916	4,825 00
5,000 00	Illinois Central Railroad Co., Refunding Mortgage Bonds	1955	4%	May-Nov.	200	Oct. 18, 1916	4,518 75
5,000 00	Chicago, Burlington & Quincy R. R. Company, General Mortgage Bonds	1958	4%	Mar.-Sept.	200	Dec. 30, 1916	4,717 50
5,000 00	Louisville & Nashville R. R. Co., Unified Mortgage Bonds	1940	4%	Jan.-July	200	Apr. 12, 1917	4,656 25
6,000 00	Baltimore & Ohio R. R. Co. (Pittsburgh, L. Erie & W. Va.), Refunding Mortgage Bonds	1941	4%	May-Nov.	240	July 16, 1917	4,808 75
5,000 00	Pennsylvania R. R. Co., General Mortgage Bonds	1965	4½%	June-Dec.	225	Oct. 19, 1917	4,608 50
							\$3,215
							\$70,762 50

PENSION BOARD OF THE AMERICAN MUSEUM OF NATURAL HISTORY

PENSION FUND ACCOUNT

RECEIPTS

1917

CASH ON HAND JANUARY 1, 1917 \$5,102.66

CONTRIBUTIONS OF SUBSCRIBING EMPLOYEES:

Deductions of 3% from Payrolls of

City Maintenance Account	\$4,409 30
General Account	2,121 00
Special Funds Account	41 74
Corporate Stock Account	227 49
Incidental Account	4 98
Morris K. Jesup Fund Account	2,767 81
	<hr/> \$9,572 32

Personal Contributions of Subscribing Employees	621 86
	<hr/> 10,194 18

CONTRIBUTIONS OF BOARD OF TRUSTEES:

To Equal Contributions of Subscribing Employees	10,167 20
RETURN OF CONTRIBUTIONS (PREVIOUSLY REFUNDED)	54 98
INTEREST ON INVESTMENT FUND	2,661 93
INTEREST ON ENDOWMENT FUND	50 34
INTEREST ON LEAVE OF ABSENCE PAYMENTS	7 47
INTEREST ON CONTRIBUTIONS RETURNED	53
INTEREST ON REPAYMENT OF CONTRIBUTIONS AND INTERESTS...	1 64
INTEREST ON CREDIT BALANCES	194 11
BURSAR'S ACCOUNT	500 00
	<hr/> \$28,935 04

Examined { ADRIAN ISELIN } *Auditing*
 and Approved { PERCY R. PYNE } *Committee*

PENSION FUND ACCOUNT

DISBURSEMENTS

1917

RETURN OF CONTRIBUTIONS	\$1,194 55
INTEREST ON CONTRIBUTIONS RETURNED	64 87
	<hr/>
	\$1,259 42
SERVICE PENSIONS	\$678 51
DEATH GRATUITIES PAID UNDER SECTION 13	3,979 15
DEATH GRATUITIES PAID UNDER SECTION 18	777 00
	<hr/>
	5,434 66
PURCHASE OF SECURITIES:	
Investment Fund	13,995 88
EXPENSES	88 29
LOAN ACCOUNT	500 00
	<hr/>
CASH ON HAND DECEMBER 31, 1917:	
Deposited with the United States Trust	
Company of New York	\$7,156 79
Deposited with Colonial Bank (Bursar's	
Account)	500 00
	<hr/>
	7,656 79

E. & O. E.

NEW YORK, December 31, 1917

HENRY P. DAVISON, *Treasurer*

PENSION BOARD OF THE AMERICAN MUSEUM OF NATURAL HISTORY

PENSION FUND—SPECIAL FUNDS ACCOUNT

RECEIPTS

1917

SPECIAL CONTRIBUTIONS No. 2:

Cash on Hand January 1, 1917	\$20 00
INTEREST ON CREDIT BALANCES	12 16
	—————
	\$32 16

LIBERTY LOAN ACCOUNTS:

Interest on Credit Balances	35 35
-----------------------------------	-------

AMERICAN MUSEUM LIBERTY LOAN No. 1:

Subscribers' Payments:

Personal	\$3,865 50
Deducted from Salaries	3,559 00
	—————
	\$7,424 50

INTEREST ON UNPAID BALANCES:

Personal Payment	\$7 93
Deducted from Salaries	131 05
	—————
	138 98

LOAN ACCOUNT	10,250 00
	—————
	17,813 48

AMERICAN MUSEUM LIBERTY LOAN No. 2:

Subscribers' Payments:

Personal	\$2,563 10
Deducted from Salaries	1,186 50
	—————
	\$3,749 60

INTEREST ON UNPAID BALANCES:

Personal Payment	\$1 64
Deducted from Salaries	18 32
	—————
	19 96

LOAN ACCOUNT	6,050 00
	—————
	9,819 56
	—————
	\$27,700 55

Examined { ADRIAN ISELIN } *Auditing*
 and Approved { PERCY R. PYNE } *Committee*

PENSION FUND—SPECIAL FUNDS ACCOUNT

DISBURSEMENTS

1917

AMERICAN MUSEUM LIBERTY LOAN NO. 1:

Purchase of Bonds	\$13,150 00
Loan Account	4,519 50
Interest on Loans	138 78
	<hr/> \$17,808 28

AMERICAN MUSEUM LIBERTY LOAN NO. 2:

Purchase of Bonds	9,100 00
Cash on Hand December 31, 1917, deposited with the United States Trust Company of New York	792 27
	<hr/>

\$27,700 55

E. & O. E.

NEW YORK, *December 31, 1917*

HENRY P. DAVISON, *Treasurer*





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